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<400> 672
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atacacantg gagenntetg ceaggeaant tatgegeaca gecatgaagn ataacetggg 120
tttngacctg agaacagctt cctatgntaa tgccattgng aangtcttca aagtgtacan 180
tgaagetggt gtgacettca catngatgga neatggetga ettneneact atectettca 240
catgtaactt ntgcagacct atcanaagtt tacatgtaac cacagnnntc cctttctctn 300
ctgactnatt aataatggct accattctta acangttaat ccaagtncag cncgtttaag 360
ggngnaaagg antcaaggtt nggcgggttc atntncaagn tgcgtgtggn agtagtaatt 420
ctnctgncan cagtgggncc atttttgggt attttnnctn tnaantanan agggctantt 480
tnatcttgtt gttgcagnct ttnc
<210> 673
<211> 431
<212> DNA
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<222> (422)
<223> n equals a,t,g, or c
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aactagtgga acccccaggg ctgcaggaat tcgggcacga ggnagagcgg acnngtgagc 120
agtactgcgg cctcctctcc tctcctaacc tcgctctcgc ggcctagctt tacccgcccg 180
cetgetegge gaccagaaca cettecacca tgaccacete agcaagttee caettaaata 240
aaggcatcaa gcaggtgtac atgtccctgc ctcagggtga gaaagtccag gccatgtata 300
tetggatega tggtactgga gaaggactge getgcaagae eeggaceetg gacagtgage 360
ccaagtgtgt ggaagagttg cctgagtgga atttcgatgg ctctagtact tnacagtctg 420
anggttccag t
<210> 674
<211> 370
<212> DNA
<213> Homo sapiens
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ggaaggtgct tttgcacttg ngtttaaaag tgttcatttt cccgggcaag cagntggcac 120
aaggcgaggt agccctctgt tgattggtgt acggagtgaa cataaacttt ctactgatca 180
catteetata etetacagaa caggeaaaga caagaaagga agetgeaate tetetegngt 240
ggacagcaca acctgccttn tcccggngga agaaaaagca gnggagtatt actttgcttc 300
tgatgcaann gctgcataga acacaccaat cgcgtcatct ttctggaaga tgatgatgtn 360
gcagcaagna
<210> 675
<211> 363
<212> DNA
<213> Homo sapiens
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<222> (50)
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<222> (99)
<223> n equals a,t,g, or c
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<220>

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<222> (318)
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<220>
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<222> (325)
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<220>
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cagtneette aageetaeaa geecegagag aatgatgant tggeactgga gaaageegae 120
gtggtgatgg tgactcacca gagcagtgca cggctggctg gagggcgtga ggctctcaga 180
cggggagcga ggctggtttc ctgtgacagc nntgngagtt catttccaac ccagaggtcc 240
gtgacacaga acctgaaggg aagcttcatc gagtgcaaga cttgccaaac tacagctngt 300
gggaacagca agcctnantt ttctnctgna gaaggagttt tcgtgagctg gaagaacaag 360
                                                                  363
ttg
<210> 676
<211> 441
<212> DNA
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<220>
<221> misc feature
<222> (214)
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<222> (353)
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<222> (397)
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<222> (404)
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<220>
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<222> (413)
<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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getgeagaag gacaageagg tetaceggge caegeacege etgetgetge tgggtgetgg 120
agaatctggt aaaagcacca ttgtgaagca gatgaggatc ctgcatgtta atgggtttaa 180
tggagacagt gagaaggcaa ccaaagtgca gganatcaaa aacaacctga aagaggcgat 240
tgaaaccatt gtggccgcca tgagcaacct ggtgcccccc gtggagctgg ccaaccccga 300
aaaccagttc agagtggact acatcctgag tgtgatgaac gtgcctgact ttnacttccc 360
tecegaatte tatgageatg eeaaggetet gtgggangat gaangagtge gtneetgeta 420
cgaacgctcc aacgaatacn n
<210> 677
<211> 550
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (429)
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<220>
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<222> (482)
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<220>
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<222> (484)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (487)
<223> n equals a,t,g, or c
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<222> (523)
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<222> (542)
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ggatcatcaa cgagcccacg gccgccgcca tcgcctacgg cctggacaga acgggcaagg 120
gggagcgcaa cgtgctcatc tttgacctgg gcgggggcac cttcgacgtg tccatcctga 180
cgatcgacga cggcatcttc gaggtgaagg ccacggncgg ggacacccac ctgggtgggg 240
aggactttga caacaggctg gtgaaccact tcgtggagga gttcaagaga aaacacaaga 300
aggacatcag ccagaacaag cgagccgtga ggcggctgcg caccgctgcg agagggccaa 360
gaggaccctg tcgtccagca cccaggccag cctggagatc gacttccttg ttttgagggc 420
ategactint acacqticat caccagggeg aaggitegaa ggagetgige ticegacett 480
gntnccnaaa cacccctggg aaccccgtgg gaaaaaaaggc ttnttgcgcc gaaaggccca 540
ancttgggac
                                                                  550
<210> 678
<211> 435
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<212> DNA

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<222> (55)
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<222> (376)
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gtaactattg gaatcaaggc tatggcaact atggatataa cagccaaggt tacggtggtt 120
atggaggata tggnctacac tggttacaac aactactatg gatatggtga ttatagcaac 180
cagcagagtg gttatgggaa ggtatccagg cgaggtggtc atcaaaatag ctacaaacca 240
tacttaaatt attccatttg caacttatcc ccaacaggtg gtgaagcata ttttnccatt 300
tgaaggttee tttgaggggg geteegeeen ggnettaatt ggentteeaa etaaattttt 360
gggtatccag tccccnatgg gagtntgcgg tggggccccc nggagtttaa ttcggggtcc 420
ccntaaagga tttnn
<210> 679
<211> 390
<212> DNA
<213> Homo sapiens
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<222> (217)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (330)
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<222> (333)
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<220>
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<222> (390)
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tccctggaag ctcctgcatg gcagctctga cagtgacact gatggtgctg aactccccac 120
tggctttggc tggggacacc cgaccacgtt tcttggagca ggtnaaacat gaatgtcatt 180
tcttcaacgg gacggaacgg gtgcggttcc tggacanata cttctatcac caagaagaat 240
acgtgcgctt cgacagcgac gtgggggaat accgggcggt gacgganctg gggcggccta 300
actocgaata ctggaacago cagaaagacn congggacag aagogggoog cggtggacac 360
                                                                  390
ctactgcaga nacactacgg ggttgggtgn
<210> 680
<211> 343
<212> DNA
<213> Homo sapiens
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<222> (3)
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<222> (8)
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 <222> (223)
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<222> (240)

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<222> (278)
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<222> (280)
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<221> misc feature
<222> (292)
<223> n equals a,t,g, or c
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<222> (331)
<223> n equals a,t,g, or c
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cagattatgc cattgccagg cgcatagtag atttgcattc aagaattgag gaatcaattg 120
nnaatatota tnocotogat gatatoagaa gatatotnon otatgoaaga aagtntaaac 180
ccaagaattc caaagantca gnggacttca ttgtggagca atntaaacat ctccgcccgn 240
aagatgggtt ctggagtagc ccagtcttca tngagggntn cagttgcggc cncattgagg 300
gccttggatc cgtctctctt ggaagccaat ngctccgggt gcc
<210> 681
<211> 523
<212> DNA
<213> Homo sapiens
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<220>
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<222> (17)
<223> n equals a,t,g, or c
<220>
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natcttccgt gacactnttg anggnacgcc cgcaggtacc cggtccggaa ttcccgggtc 60

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<222> (442)
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<222> (503)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (514)
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<400> 681
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qacccacgcg tncgcccaat tttaccaatc tatcacccta tagaagagct aatgttagta 120
taagtaacat gaaaacattc ncctccgcat aagcctgcgt cagattaaaa cactgaactg 180
acaattaaca goocaatato tacaatcaac caacaagtca ttattaccot cactgtcaac 240
ccaacacagg catgctcata aggaaaggtt aaaaaaagta aaaggaactc ggcaaatctt 300
accocgcctg tttaccaaaa acatcacctc tagcatcacc agtattagag gcaccgcctg 360
cccagtgaca catgtttaac ggncgcggta ccctaaccgt gcaaaggtag cataatcact 420
tggtccttaa ttagggacct gnatgaatgg ctccacgagg gtcagctggc tcttactttt 480
aaccagngaa attgacctgn cgngaagagg cggnatgaca cag
<210> 682
<211> 713
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (423)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (583)
<223> n equals a,t,g, or c
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<221> misc feature
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<222> (633)
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<222> (640)
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<221> misc feature
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<222> (660)
<223> n equals a,t,g, or c
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aaatcttacc ccgcctgttt accaaaaaca tcacctctag catcaccagt attagaggca 120
ccgcctgccc agtgacacat gtttaacggc cgcggtaccc taaccgtgca aaggtagcat 180
aatcacttqt tccttaaata gggacctgta tgaatggctc cacgagggtt cagctgtctc 240
ttacttttaa ccagtgaaat tgacctgccc gtgaagaggc gggcatgaca cagcaagacg 300
agaagaccct atggagcttt aatttattaa tgcaaacagt acctaacaaa cccacaggtc 360
ctaaactacc aaacctgcat taaaaatttc ggttggggcg acctcggagc agaacccaac 420
ctnegageag tacatgetaa gaetteacea gteaaagega aetaetatae teaattgate 480
caataacttg accaacggaa caagttaccc tagggataac agcgcaatcc tattctagag 540
tocatatoaa caatagggtt tacgaacctc gatgtttgat cangacattc ccatngtgca 600
gcccnctatt taaaaggttc gttggntcac gantaaaggn cctacntgaa ctgagttcan 660
aaccggagta aattccaagg cgggttttta tctaccttaa aattccccc tgg
<210> 683
<211> 289
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
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<222> (15)
<223> n equals a,t,g, or c
<220>
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<222> (28)
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<220>
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<222> (73)
<223> n equals a,t,g, or c
<220>
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<222> (80)
<223> n equals a,t,g, or c
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<220>
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<222> (225)
<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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toccontact aaagngaaca aaagctgnag ctccacegeg gtggcggccg ctctagaact 60
agtggatece conggetgen tgaattegge acgageggea egaggeeetg eggggtgtac 120
acccccqtt geggeteggg cetgetetge tacccgcccc gaggggtgga gaagcccctg 180
cacacactga tgcacgggca aggcgtgtgc atggagctgg cgganatcga ggccatncan 240
gaaagcctgc ancectctga caaggacgag ggtgaccacc ccaacanca
<210> 684
<211> 464
<212> DNA
<213> Homo sapiens
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<222> (4)
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<222> (353)
<223> n equals a,t,g, or c
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ggangagccc agccctggga ttttcaggtg gtttcatttg gtgaacagga ctgaacagag 60
agaactcacc atggaatttg ggctgagctg gctttttctt gtggctattt taaaaggtgt 120
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ccagtgtgag gtgcaattgg tggagtctgg gggaggcttg gtacagcctg gggggtccct 180
gagactetee tgtacagtet etggatteac etttegeaac tatgeeatga gttgggteeg 240
ccagggtcca gggaagggc tggaatgggt ctcagcaatt gacggtagtg gttataacac 300
atactacgag aggtccctgc agggccgctt tagtgtctcc agagacaatt ccnagaacac 360
actatatctg caaatgaaca gcctgggagc cgaggacacg gccatctatt attgtgcgaa 420
gacagaacgt atgggtactg gctggtacgg acgaaatgac tact
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<211> 545
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<222> (442)
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<222> (456)
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<222> (505)
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<221> misc feature
<222> (509)
<223> n equals a,t,g, or c
<220>
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<222> (536)
<223> n equals a,t,g, or c
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aggtaceggt ceggaattee egggtegace caegegteeg gacegteace cetggagaga 120
cggcctccat ctcctgcagg tctagtcaga ccctcctgca tgtcaatgga cacaactatt 180
tggattggta catgcagaag ccagggcagc ctccacagct cgtggtctat aggggttcca 240
ategggeete eggggteeet gacaggttea gtggeggtgg ateaggeaca gattttacac 300
ttagaatcac cacggtggag gctgangatg ttggcgttta ttactgcatg caagctctac 360 .
aaagtccgta cacttttggc caggggacca agctggagat caaacgaact gtgggctgca 420
ccatctgnct tcatcttncc gncatctgat gaacanntga aatctggaac tgcctctggt 480
gggggcctgc tgaataactt ctatnccana gaggcccaaa gtaccagtgg aaaggnggga 540
taacg
<210> 686
<211> 496
<212> DNA
<213> Homo sapiens
<220>
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<222> (358)
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (417)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (460)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (472)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (481)
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<220>
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<222> (488)
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atcccccggg ctgcaggaat tcggcacgag cggctgggcg ctgaggatca gccgcttcct 120
geotogatte cacagetteg egeogtotae totegececa tecetogege eccageetge 180
caageagegt geeeeggttg caggegteat geagegggeg egaceaege tetgggeege 240
tgcgctgact ctgctggtgc tgctccgcgg gccgccggtg gcgcgggctg gcgcgagctc 300
ggggggcttg ggtcccgtgg tgcgctgcga accgtgcgac gcgcgtgcac tggcccantg 360
egegeettee geeegeegtg tgegeeggaa ettggtgege caageeggge ttgeggntge 420
tgcctgacgt gcgcactgag cgaagggcca gccgtgcggn atctacaccg ancgctgtgg 480
nttccggnct tcgttg
                                                                  496
<210> 687
<211> 476
<212> DNA
<213> Homo sapiens
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (7)
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<223> n equals a,t,g, or c
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<221> misc feature
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<223> n equals a,t,g, or c
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<222> (56)
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tctagaacta gtggatcccc cgggctgcag gaattcggca cgagattgat gacaccaata 120
tcacacgact gcagctggag acagagatcg aggctctcaa ggaggagctg ctcttcatga 180
agaagaacca cgaagaggaa gtaaaaggcc tacaagccca gattgccagc tctgggttga 240
ccgtggaggt agatgccccc aaatctcagg acctcgccaa gatcatggca gacatccggg 300
cccaatatga cgagctggct cggaagaacc gagaggagct agacaagtac tggtctcagc 360
agattgagga gagcaccaca gtggtcacca cacagtctgc tgaggttgga gctgctgaga 420
cgacgeteac agagetgaga egtacagtee agteettgga gategacetg ggaett
<210> 688
<211> 483
<212> DNA
<213> Homo sapiens
<220>
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<222> (2)
<223> n equals a,t,g, or c
<220>
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<222> (4)
<223> n equals a,t,g, or c
<400> 688
anantaaccc tcactaaagg gaacaaaagc tggagctcca ccgcggtgcg gccgctctag 60
aactagtgga tcccccgggc tgcaggaatt cggcacgagc aggttcccgc ccggaagaag 120
cgaccaaagc gcctgaggac cggcaacatg gtgcggtcgg ggaataaggc agctgttgtg 180
ctgtgtatgg acgtgggctt taccatgagt aactccattc ctggtataga atccccattt 240
gaacaagcaa agaaggtgat aaccatgttt gtacagcgac aggtgtttgc tgagaacaag 300
gatgagattg ctttagtcct gtttggtaca gatggcactg acaatcccct ttctggtggg 360
gatcagtatc agaacatcac agtgcacaga catctgatgc taccagattt tgatttgctg 420
gaggacattg aaaagcaaaa tccaaccagg ttctcaacag gctgacttcc tgggatgcac 480
<210> 689
<211> 339
<212> DNA
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<213> Homo sapiens
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<220>
<221> misc feature
<222> (135)
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<220>
<221> misc feature
<222> (289)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (337)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (338)
<223> n equals a,t,g, or c
<400> 689
aggcaggagg aagccgatcg aaaactcaga gaggaggaag agaagaggag gctaaaggaa 60
gagattgaaa ggcgaggagc agaagctgct gagaaacgcc agaagatgnc agaagatggc 120
ttgtcagatg acagnaaacc attcaagtgt ttcantccta aaaggttcat ctcttcaaga 180
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tagaagagcg agcagatttt tgattaagtc tgtgcagaaa agcagtggtg ttcaantcga 240
cccttcaagc agcattagtn ttccaagttt gacagcagan tggagcatnt taccatggca 300
tttgagggga ccaaaagcag ccaaaacctt aaaaaanna
<210> 690
<211> 594
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (473)
<223> n equals a,t,g, or c
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acaaagagaa gggggagaaa acctagcaga ccaccatgtg ctatgggaag tgtgcacgat 120
gcatcggaca ttctctggtg gggctcgccc tcctgtgcat cgcggctaat attttgcttt 180
actttcccaa tggggaaaca aagtatgcct ccgaaaacca cctcagccgc ttcgtgtggt 240
tcttttctgg catcgtagga ggtggcctgc tgatgctcct gccagcattt gtcttcattg 300
ggctggaaca ggatgactgc tgtggctgct gtggccatga aaactgtggc aaacgatgtg 360
cgatgctttc ttctgtattg gctgctctca ttggaattgc aggatctggc tactgtgtca 420
ttgtggcage cettggetta geagaaggae eactatgtet tgatteeete ggneagtgga 480
actacacctt tgccagcacc gagggccaag taccttctgg ataccttcac atggtccgag 540
tgcactgaac ccaacacatt ggggaatgga atggatetet ggtttetate etet
<210> 691
<211> 538
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (55)
<223> n equals a,t,g, or c
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ctagaactag tggatccccc gggctgcagg aattcggcac gagcgcatga ctttgtcttc 120
tecgeacgae tgttacagag gtetecagag cettetetet eetgtgeaaa atggeaacte 180
ttaaggaaaa actcattgca ccagttgcgg aagaagaggc aacagttcca aacaataaga 240
tcactgtagt gggtgttgga caagttggta tggcgtgtgc tatcagcatt ctgggaaagt 300
ctctggctga tgaacttgct cttgtggatg ttttggaaga taagcttaaa ggagaaatga 360
tggatctgca gcatgggagc ttatttcttc agacacctaa aattttggca gataaagatt 420
attetgtgae egecaattet aagattgtag tggtaactge aggagteegt cageaagaag 480
gggagagtcg gctcaatctg gtgcagagaa atgttaatgt cttcaaattc attattcc 538
<210> 692
<211> 201
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (125)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (143)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (161)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (165)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (183)
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aagtccaata tggcaactct aaaggatcag ctgatttata atcttctaaa ggaagaacag 120
acconccaga ataagattac agntgttggg gttggtgctg ntggnatggc ctgtgccatc 180
aanatottaa tgaaggactt g
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<210> 693
<211> 589
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (23)
<223> n equals a,t,g, or c
<220>
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<222> (271)
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<220>
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<222> (312)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (342)
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<220>
<221> misc feature
<222> (354)
<223> n equals a,t,g, or c
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<221> misc feature
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<221> misc feature .
<222> (401)
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<222> (424)
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<222> (437)
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<222> (466)
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<222> (572)
<223> n equals a,t,g, or c
<220>
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<222> (576)
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ccggggttgt taacttgttt attgcagctt ataatggtta caaataaagc aatagcatca 120
caaatttcac aaataaagca ttttttcac tgcattctag ttgtggtttg tccaaactca 180
tcaatgtatc ttatcatgtc tggatcgatc ctgcattaat gaacggccaa cgcgcgggga 240
gaggeggttt gegtattgge tggegtaata negaaaagee egeacegate geeetteeca 300
acagttgcgc ancetgaatg gegaatggga egegeeetgt aneggegeat taanegegge 360
gggtgtggtg gttaccncaa cgtgaccgct acacttgcca ncgccctaac gcccgctcct 420
ttenetttet teecetneet ttetececea egtteegeeg ggtttneece gteaaactet 480
aaatccgggg ntccccttta agggttccca atttaattgc ttaacggcac ctccaacccc 540
aaaaaaactt naataagggg tgaatggttc nnctanttgg gccaccccc
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<211> 386
<212> DNA
<213> Homo sapiens
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<222> (135)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (149)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (173)
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<222> (202)
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<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (340)
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<222> (369)
<223> n equals a,t,g, or c
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<222> (370)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (383)
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gagatetgee etgeeggeea eggetacace tacgegaget eegacateeg eetgteeatg 120
aggaaagccg aggangaaga actggcaang cccccaaggg agcaagggca gangagcagc 180
tgggcactgc ccgggccaac ananaagcag cccctccggg ttcgtcacgg acacctggct 240
tgangccggg accatecetg acaaggttga eteteaaget ggccaggtca egaccagtgt 300
cactcatgca cctgcctggg tcacanggaa atgccacaan cccacccaat gcctgaacag 360
ggaattgcnn aaaattccgg aanaaa
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<211> 475
<212> DNA
<213> Homo sapiens
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<222> (278)
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<222> (423)
<223> n equals a,t,g, or c
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<222> (459)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (463)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (465)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (466)
<223> n equals a,t,q, or c
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aagcagtgtc aagacagtaa ggattcaaac catttgccaa aaatgagtct aagtgcattt 120
actetettee tggeattgat tggtggtace agtggceagt actatgatta tgatttteee 180
ctatcaattt atgggcaatc atcaccaaac tgtgcaccag aatgtaactg ncctgaaagc 240
tacccaagtg ccatgtactg tgatgagctg aaattganaa gtgtaccaat ggtgcctcct 300
ggaatcaagt atctttacct taggaataac cagattgacc atattgatga aaaggccttt 360
gagaatgtaa ctgatctgca gtggctcatt ctagatcaca accttctaga aaactccaag 420
atnaaaggga gagttttctc taaattgaaa caactgaana agntnntata accac
<210> 696
<211> 444
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (402)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (410)
<223> n equals a,t,g, or c
<400> 696
tatcaagtgt actccaaaat ccaggcaaca aacacatggc tgtttctaag tagctgtaac 60
ggaaatgaaa cttctctttg ggactgcaag aactggcaat ggggtggact tacctgtgat 120
cactatgaag aagccaaaat tacctgctca gcccacaggg aacccagact ggttggaggg 180
gacatteect gttetggaeg tgttgaagtg aageatggtg acaegtgggg etceatetgt 240
gattcagact totototoga agotgocago gttotatgoa gggaattaca gtgtggcaca 300
gttgtctcta tcctgggggg agctcacttt ggagagggaa tggacagatc tgggctgaag 360
aattccagtg ttgagggaca tgaatcccca tctttcatct tnccagtagn aaccccgccc 420
                                                                  444
aaaaggaact tgtagccaca gcaa
<210> 697
<211> 411
<212> DNA
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<213> Homo sapiens
<220>
<221> misc feature
<222> (104)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (305)
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<222> (370)
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<222> (375)
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<222> (391)
<223> n equals a,t,g, or c
<220>
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<222> (410)
<223> n equals a,t,g, or c
<400> 697
aacatggcgg gtgtggagga ggtageggcc teegggagec acctgaatgg egacetggat 60
ccagacgaca gggaagaagg agetgeetet aeggetgagg aaanageeaa gaaaaaaaga 120
cgaaagaaga agaagagcaa agggccttct gcaggtaaag agagttttat gttttcccag 180
teeceteegg gaacggetga actgtttgge teaggeeegt tgagggggee gggacegggg 240
ccccagagcc ccgactagac tgattcttgg gcctgacagg gtggcaaagc cgggctatag 300
atcanggtgc acctgagett tetetgatgt atgeccange agatetecag gtatteagag 360
caccigettn eccanceigt tagicitagi nacceaacce teetgigean a
<210> 698
<211> 135
<212> DNA
<213> Homo sapiens
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<220>

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<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (79)
<223> n equals a,t,g, or c
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ggcgtgggtt tccgggaggg nacctgnggg gcccagaccc agcgcatccg gtgnagggtg 60
ccctncaact ggaagatgna tttcgagccg atttcaagta caaagtttta gaacttgggg 120
tgcgtgtgat taggg
<210> 699
<211> 434
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (56)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (61)
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<221> misc feature
<222> (321)
<223> n equals a,t,g, or c
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<222> (369)
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<222> (394)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (427)
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ngcacagttt tctctcttgg agcatgcatg gaaggcctga atattttgct taacagactg 120
ttggggattt cattatatgc agagcagcct gcaaaaggag aggtgtggag cgaagatgtc 180
cgaaaactgg ctgttgttca tgaatctgaa ggattgttgg ggtacattta ctgtgatttt 240
tttcagcgag cagacaaacc acatcaggat tgccatttca ctatccgtgg aggcagacta 300
aaaggaagat gggagactat ncaactccca gttgtaagtt cttatgctgg aatcttcccc 360
gttcccgnna gggagttctc caactttggc naangcctgg gcatgatggg aaaacctttc 420
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cagatgagac cggtgtccag ggtactggct cctcatctca ctcgggctta tgccaaanat 120
gtaaaatttg gtgcagatgc ccgagcctta atgcttcaag gtgtagacct tttagccgat 180
gctgtggccg ttacaatggg gccaaaggga agaacagtga ttattgagca gagttgggga 240
agtcccaaag taacaaaaga tggtgtgact gttgcaaagt caattgactt aaaagataaa 300
tacaagaaca ttggagctaa acttgttcaa gatgttgcca ataacacaaa tgaagaagct 360
ggggatggca ctaccactgc tactgtactg gcacgctcta tagccaagga aggcttcgag 420
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tcccaaagta acaaaagatg gtgtgactgt tgcaaagtca attgacttaa aagataaata 180
caagaacatt ggagctaaac ttgttcaaga tgttgccaat aacacaaatg aagaagctgg 240
ggatggcact accactgcta ctgtactggc acgctctata gccaaggaag gcttcgagaa 300
gattagcaaa ggtgctaatc cagtggaaat caggagaggt gtgatgttag ctgttgatgc 360
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gcagggtcca agcggctttt cttctggatg caggaaccca agacagacca ggatgaggag 120
cattgccgga aagtcaacga gttatctgga acaaccccc gatgcctggg gcactggggg 180
ccagcggaac agcggccacg aantctctgc gctangcggt tgaggtggcn tgcagagent 240
gctggggaaa cntgagccac agccag
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<211> 244
<212> DNA
<213> Homo sapiens
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ataaaatgac agtttgaaca tacaaaaccc accccattcc tccccacact catcgccctt 120
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accacgetac tectacetat eteccetttt atactaataa tettataaaa aaaaaaaaa 180
 aaaaaaaaa aaangggggg gccgggnncc natttngccc aaaggggggg ggttttaaaa 240
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ccaaccttcc cgccagacta cggcttcccc gaacgcaagg ancgcganat ggtggccaca 180
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cancangana tgatggacgc gcactnaagc tccanctgcg ggantactgc gcccaccaac 240
tcatccgggt gctcaattnc aaccttaaan cttcccccac ttccttggct tgcnaaccag 300
gaacgggaca aatnggaata ntnccaaaca ccccanaant tttnttnccc ttaaanantt 360
tttaaacgga aacgaagggt ntcccccccg gaaaaaaaac nggggnaaaa aaaggggaaa 420
ttttttnccc ccccccgcc cgnggaaatt ttcccccccg tt
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<211> 436
<212> DNA
<213> Homo sapiens
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ggtgttgcgg ctttataagc gggcgctacg ccacctcgag tcgtggtgcg tccagagaga 120
caaataccga tactttgctt gtttgatgag agcccggttt gaagaacata agaatgaaaa 180
ggatatggcg aaggccaccc agctgctgaa ggaggccgag gaagaattct ggtaccgtca 240
gcatccacag ccatacatct tccctgactc tcctgggggc acctcctatg agagatacga 300
ttgctacaag gtcccagaat ggtgcttaga tgactggcat ccttctgaga aggcaatgta 360
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<222> (467)
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agngcctgcg tncgtgagaa ttcagcatgg aatgactcta ctatttnctg ggatttctgn 120
tnctggntgn aagattgcca cttgatgccg ccaaacgatt ncatgatgag ctgggnaatg 180
aaagaccttn tgcttacatg anggagcaca atcaattaaa tggctggtnt tctgatgaaa 240
atgactggaa tgaaaaactc tacccagtgt ggaagcggng agacatgang tgngaaaaac 300
tgctggaagg gaggcccgtg tgcaaggcgg tcctgaccag ngactnacca acccttggng 360
ggctcaaata naacattngc cggngaacct gatattccct aaangccaaa aggaagaagc 420
caatggcaac ataggctatg anaagaactg ganaaatgaa gctgggntaa acagctgaac 480
canaagg
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<211> 414
<212> DNA
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<221> misc feature
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tgccgccacc cgatggaaga ttcgatggac atggacatga gcccctgag gccccagaac 120
tatetttteg gttgtgaact aaaggeegae aaagattate aetttaaggt ggataatnat 180
gaaaatgagc accagttatc tttaagaacg gtcngtttng gggctggtgc aaaggatgag 240
ttgcacattg ttgaagcaga ggcaatgaat tacgaaggca gtccaattaa agtaacactg 300
gcaactttga aaatgtctgt acagccaacg gttttcccct tggggggcttt gaataacacc 360
accanggncc ttaaggttga antgtggttc agggccatgc cnattagngg acag
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<212> DNA
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gegegeetee teegeegeeg eggacteegg eagetttate geeagagtee etgaaetete 120
getttetttt taateeestg categgatea eeggegtgee eeaccatgte agaegeagee 180
gtagacacca gctccgaaat caccaccaag gacttaaagg agaagaagga agttgtggaa 240
gaggcagaaa tggaagagac gccctgctaa cgggatgcta atgaggnaat ggggagcagg 300
aggtgacatg aggtagccga gaagaggaag aagtngggag aanagagaga anaanaagtt 360
<210> 709
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ggcccaccat cccggcgngg accttttccg ttagcgtggg tgatattgtt cctgctcgag 180
geneaaatng gteettggna teteetteea tetgeeeatt aactetegea agtgeeteeg 240
ngaggaaatt cnc
                                                                   253
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<222> (476)

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caatgatgct tttaagggaa tgactagtga agaaaaagaa attctgatac gggacaaaaa 120
tgctcttcaa aacatcattc tttatcacct acaccaggag ttttcattgg aaaaggattt 180
gaacctggtg ttactaacat ttttaaagac cacacaaggn agcaaaatct ttctggaagg 240
aagtgaaatg gttacacttc tggtgaatgg atttggaaat ccaaaagant ctgacatcca 300
tggnccacca anggtggtaa tttcatgttg taggttaaac tncncttttc cagcagncac 360
accttttggg natggntcaa ctggtnggga tacttgatta tttnatncaa tnncctcccn 420
atttaaggtt ttttccgggg tgggcccctt caagggaatn ccngggctnt tttttnacac 480
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<211> 461
<212> DNA
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<222> (221)
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tgcccagtgt atcttggatg ctgctttcct gcctcatgct gctgtctcag gttcaaggtg 180
aagaacccca gagggaactg ccctctgcac ggatccgctg ncccaaaggc tccaaggcct 240
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cctgccagaa gcggccctct ggaaacctgg tgtctgngct cagtggggct gagggatcct 360
tegngectee etggtgaaga geattggtaa eagetaetea taegtetgga ttgggeteea 420
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 tggtctcggg gacctccgca gcagctcccc agggcccacg ggccagcccc gccgcctcg 180
 caacctggca gccgccgccg tggaagagca gtatagctgt gactatggat ctggcagatt 240
 ctttatcctt tgtggacttg gaggaattat tagctgtggc acaacacata cagcattggt 300
 tcctctagat ctggttaaat gcagangcag gtttgttttt gcatgctgga cttagagcna 360
. ttgaagcntg actgangtta agtattagna ta
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<222> (703)
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aggatcacca gataccaggg tgttaatctt tatgtgaaaa atcttgatga tggtattgat 120
qatgaacqtc tccqqaaaqa qttttctcca tttggtacaa tcactagtgc aaaggttatg 180
atggagggtg gtcgcagcaa agggtttggt tttgtatgtt tctcctcccc agaanaagcc 240
actaaagcag ttacanaaat gaacggtaga attgtggcca caaagccatt gtatgtagct 300
ttageteage geaaagaaga gegeeagget caceteacta accagtatat geagagaatg 360
gcaagtgtac ganctgttcc caaccetgta atcaaccect accagecage acctecttca 420
ggttacttca tggcagctat cccacagact cagaacgtgc tgcatactat cctcctagcc 480
aaattgctca actaanacca agtcctcgct ggactgctca gggtgccata actcatccat 540
tccaaaatat gcccggtgct atccgcccag ctgctcctan aacaccattt agtactatga 600
naacagette tteteageaa catettaatg cacagecaca anttacaatg cacaneetge 660
tgttcatgtt caaggtcagg aacctttgan tgcttccatg ttngcatctg ccccccccca 720
aaacaaaacc aatt
<210> 714
<211> 500
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (5)
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<220>
<221> misc feature
<222> (449)
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tetageaact agtggatece eegggeetgt eaggaatteg geaegagetg ggacaagega 120
gtttttaaac aaagtgactg aggcacagga agatggccag tcaacttctg aattgattgg 180
ccagtttggt gtcggtttct attccgcctt ccttgtagca gataaggtta ttgtcacttc 240
aaaacacaac aacgataccc agcacatctg ggagtctgac tccaatgaat tttctgtaat 300
tgctgaccca agaggaaaca ctctaggacg gggaacgaca attacccttg tcttaaaaga 360
agaagcatct gattaccttg aattggatac aattaaaaat ctcgtcaaaa aatattcaca 420
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gttcataaac tttcctattt atgtatggng cagcaagact gaaactgttn aggagcccat 480
                                                                   500
ggaggaagaa ggagcagcca
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<211> 491
<212> DNA
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<222> (271)
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<222> (422)
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<222> (473)
<223> n equals a,t,g, or c
<220>
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<222> (474)
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anaantacaa caagtgggaa acgatagagg cttggactca acaagtcgcc actganaatc 120
cageceteat etetegeagt gttateggaa ceacatttga gggaegeget atttacetee 180
tgaaggttgg caaagctgga caaaataagc ctgccatttt catggactgt gggtttccca 240
tgccaganan ttggatttct ccctgcattc ngccagtngg ttttntaaaa aangcggttc 300
ccttcctatn gacntttana ncccanttga caaacttcnc caacaattta aanttttatn 360
ttcccgccct gtggccccaa tattgaaggg caacttcnac cccgggaacn aaaacccaat 420
tntggaaaaa aaaacccccc cccccctgg tgggattctt gctttggttg ggnnccaccc 480
caaaaaaatt t
<210> 716
<211> 331
<212> DNA
<213> Homo sapiens
<220>
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<222> (242)
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<222> (303)
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<222> (321)
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<220>
<221> misc feature
<222> (322)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (326)
<223> n equals a,t,g, or c
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gctacceggt gtgeggeage gaeggeacea cetaccegag eggetgeeag etgegegeeg 120
ccagccagag ggccgagagc cgcggggaga aggccatcac ccaggtcagc aagggcacct 180
gegageaagg teetteeata gtgaegeeee ecaaggaeat etggaatgte aetggtgeee 240
angtgtactt gagctgtgag gtcatcggaa tcccgacacc tgtcctcatc tggaacaagg 300
tanaaagggg tcactatgga nntcanagga c
<210> 717
<211> 486
<212> DNA
<213> Homo sapiens
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<222> (5)
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<221> misc feature
<222> (25)
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<222> (32)
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<220>
<221> misc feature
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<222> (38)
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<222> (99)
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<222> (107)
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tatenttact aagggtacaa agttngggte tnecacengg tngaggaceg etectageaa 60
ctagtggntc ccccgggnct gcaggaattc ggcacgagna tattagncag cggttattcg 120
gtgageggtg gtggtttatt cttccgtgga gttaagggct ccgtggacat ctcaggtctt 180
cagggtcttc catctggaac tatataaagt tcagaaaaca tgtctcgaga tatgactcca 240
ggaccactat attitutuca gaaggtugut tataccaagt tgaatatguu atggaaguta 300
ttggacatgc aggcacctgt ttgggaattt tagcaaatga tggtgttttg cttgcagcag 360
agagacgcaa catccacaag cttcttgatg aagtcttttt ttctgaaaaa atttataaac 420
tcaatgagga catggcttgc agtgtggcag gcataacttt ctgatgctaa tgttctgact 480
aatgac
<210> 718
<211> 479
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (436)
<223> n equals a,t,g, or c
<400> 718
tegacecaeg egteegeage ceaeceatee aegttgacte atecteagag aegaategae 60
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acceteaact cagatggata cacceetgag ceagacaaac egeggeegat geeeatggae 120
acgagogtgt atgagagoco ctacagogac ccagaggago tcaaggacaa gaagototto 180
ctgaagcgcg ataacctcct catagctgac attgaacttg gctgcggcaa ctttggctca 240
gtgcgccagg gcgtgtaccg catgcgcaag aagcagatcg acgtggccat caaggtgctg 300
aagcagggca cggagaaggc agacacggaa gagatgatgc gcgaggcgca gatcatgcac 360
cagctggaca acccctacat cgtgcggctc attggcgtct gccaggccga agccctcatg 420
ctggtcatgg agatgntggg ggcgggcgct gcacaagttc ctggtcggca agaaggaag 479
<210> 719
<211> 572
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (418)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (421)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (501)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (503)
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<221> misc feature
<222> (526)
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<222> (546)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (559)
<223> n equals a,t,g, or c
<400> 719
gcgtgcccat gagaatgaga tcaccaaagt gcgaaaagtt actttcaatg gactgaacca 60
gatgattgtc atagaactgg gcaccaatcc gctgaagagc tcaggaattg aaaatggggc 120
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tttccaggga atgaagaagc tctcctacat ccgcattgct gataccaata tcaccagcat 180
tecteaaggt etteeteett eeettaegga attacatett gatggeaaca aaateageag 240
agttgatgca gctagcctga aaggactgaa taatttggct aagttgggat tgagtttcaa 300
cagcatetet getgttgaca atggetetet ggecaacaeg ceteatetga gggagettea 360
cttggacaac aacaagctta ccagagtacc tggtgggctg cagagcataa agtacatnca 420
nggtggctac cttcataaca accatatctc tgtagttgga tcaaagtgac ttctggccac 480
ctggacacaa ccacccaaaa ngnttcttaa ttccgggtgg gaagcntttt aacaaacccg 540
ggccangact ggggagaana cagccatcca cc
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<211> 487
<212> DNA
<213> Homo sapiens
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<222> (467)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (468)
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ggntaaatca gaactcgaat ggccttgttt tcttgctctg gggctcttat gctcagaaga 60
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<221> misc feature

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agggcagtgc cattgatagg aagcggcacc atgtactaca gacggctcat ccctcccctt 120
tgtcagtgta tagagggttc tttggatgta gacacttttc aaagaccaat gagctgctgc 180
agaagtctgg caagaagccc attgactgga aggagctgtg atcatcagct gaggggtggc 240
ctttgagaag ctgctgttaa cgtatttgcc agttacgaag ttccactgaa aattttccta 300
ttaattotta agtactotgo ataaggggga aaagottooa gaaagcagoo atgaaccagg 360
ctgtccagga atggancctg tatccaacca caaacaacaa aggctaccct ttgacccaaa 420
tgtctttctc tgcaacatgg cttcggncta aaatatgcnn aagacannat gagggccaat 480
acttaat
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<211> 464
<212> DNA
<213> Homo sapiens
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<222> (222)
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<222> (312)
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<221> misc feature
<222> (347)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (349)
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<222> (364)
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<220>
<221> misc feature
<222> (415)
<223> n equals a,t,g, or c
<220>
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<222> (436)
<223> n equals a,t,g, or c
<220>
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<222> (443)
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<222> (448)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (455)
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tectgggttg tgaggagteg cegetgeege cactgeetgt getteatgag gaagatgete 120
geogeogtet ceegegtget gtetggeget teteagaage eggeaageag agtgetggta 180
gcatcccgta attttgcaaa tgatgctaca tttgaaatta anaaatgtga ccttcaccgg 240
ctggaagaag ccctcctgtc acaacagtgc tcaccaaggg aagatgggct caaatactac 300
aggatgatgc anactgtacc cgaatggaat tgaaacagat cactgtntna acagaaaatt 360
atcntggttt ctgtccttgt gtgatgtcag aacttgctgt gtggcctgga gccgnatcac 420
cccaaacact ctccanctac ggntccgntt atttnccggg cttc
<210> 722
<211> 320
<212> DNA
<213> Homo sapiens
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<222> (12)
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<220>
<221> misc feature
<222> (43)
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<220>
<221> misc feature
<222> (113)
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<220>
<221> misc feature
<222> (142)
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<220>
<221> misc feature
<222> (152)
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<220>
<221> misc feature
<222> (153)
<223> n equals a,t,g, or c
<220>
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<222> (211)
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<221> misc feature
<222> (263)
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<221> misc feature
<222> (275)
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<222> (299)
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<220>
<221> misc feature
<222> (308)
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<400> 722
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agtoggtoag ogcoggatga cotcagoago catgtogaag coccatagtg aanoogggac 120
tgccttcatt cagacccage anctgcacge anneatggct gacacattce tggagcacat 180
gngccgcctg gacattgatt caccacccat nacaggccgg aacactggca tcatctgtac 240
cattggccca gcttcccgat cangtggaga cggtnaagga natgattaaa gcctggaang 300
aatgtggntc gtctgaactt
                                                                   320
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<210> 723

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<211> 152
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
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<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (111)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (127)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (148)
<223> n equals a,t,g, or c
<400> 723
gcccaccatg gctgcaatcc gaaagaagct ggtgatcgtt ggggatggtg cctgtgggaa 60
gacctgcctc ctcatcgtnt tcagcangga tcagtttccg gaggtctacg nccctactgt 120
cctttgngaa ctatattgcg cacattgngg cg
<210> 724
<211> 573
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (463)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (514)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (553)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (559)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (569)
<223> n equals a,t,g, or c
<400> 724
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aaaattgcat ctgatggtct caagggtcgt gtgtttgaag tgagtcttgc tgatttgcag 120
aatgatgaag ttgcatttag aaaattcaag ctgattactg aagatgttca gggtaaaaac 180
tgcctgacta acttccatgg catggatctt acccgtgaca aaatgtgttc catggtcaaa 240
aaatggcaga caatgattga agctcacgtt gatgtcaaga ctaccgatgg ttacttgctt 300
cgtctgttct gtgttggttt tactaaaaaa cgcaacaatc agatacggaa gacctcttat 360
gctcagcacc aacaggtccg ccaaatccgg aagaagatga tggaaatcat gacccgagag 420
gtgcagacaa atgacttgaa agaagtggtc aataaattga ttncagacgc attggaaaag 480
acatagaaaa ggcttggcaa tctattatcc tctncatgat ggcttcgtta gaaaagtaaa 540
aatgctgaag aanccaagnt tgaatgggna aac
<210> 725
<211> 403
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<400> 725
gettgaaant aacceteact aaagggaaca aaagetggag etceacegeg gtgeggeege 60
tetagaacta gtggateece egggetgeag gaatteggea egagteetgg teegegeeag 120
agcccagcgc gcctcgtcgc catgcctcgg aaaattgagg aaatcaagga cttcctgctc 180
acagecegae gaaaggatge caaatetgte aagateaaga aaaataagga caaegtgaag 240
tttaaagttc gatgcagcag atacctttac accctggtca tcactgacaa agagaaggca 300
gagaaactga agcagtccct gcccccggt ttggcagtga aggaactgaa atgaaccaga 360
cacactgatt ggaactgtat tatattaaaa tactaaaaat cct
                                                                   403
<210> 726
<211> 502
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
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<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c
<220>
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<222> (12)
<223> n equals a,t,g, or c
<220>
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<222> (256)
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gccgctctag aactagtgga tcccccgggc tgcaggaatt cggcacgaga gccatcaggt 120
aagccaagat gggtgcatac aagtacatcc aggagctatg gagaaagaag cagtctgatg 180
tcatgcgctt tcttctgagg gtccgctgct ggcagtaccg ccagctctct gctctccaca 240
gggctccccg ccccanccgg cctgataaag cgcgccgact nggctacaag gccaagcaag 300
gttacgttat atataggatt cgtgttcgac gtggtggccg aaaacgccca gttcctaagg 360
gtgcaattac ggcaagcctn tccatcatgg ngttaaccag ctaaagtttg ctcgaagcct 420
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tcagtccntt gcagaggagc gagctggacg ccactntggg gctctgagag tcctgaattc 480
ttactgggtt ggtgaagatt cc
<210> 727
<211> 361
<212> DNA
<213> Homo sapiens
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<222> (318)
<223> n equals a,t,g, or c
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<222> (360)
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gtagtgggtc gctgcctgcc cacccccaaa tgccacacgc cgcccctcta ccgcatgcga 120
atctttgcgc ctaatcatgt cgtcgccaag tcccgcttct ggtactttgt atctcagtta 180
aagaagatga agaagtcttc aggggagatt gtctactgtg ggcaggtgtt tgagaagtcc 240
cccctgcqqq tgaagaactt cgggatctgg ctgcgctatg actcccggag cggcacccac 300
aacatgtanc gggaatancg ggacctgacc aacgcaggcg ctgtcaacca gtgtaacggn 360
                                                                   361
<210> 728
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<222> (360)
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<222> (389)
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gagaccaatg aaatcgccaa tgccaactcc cgtcagcaga tccggaagct catcaaagat 120
gggctgatca tccgcaagcc tgtgacggtc cattcccggg ctcgatgccg gaaaaacacc 180
ttggcccgcc ggaaaggcan gcacatgggc atagttagcg gaaaggtaca gccnatgccc 240
gaatgccaaa naaggtcaca tggattaaga aaatgaagat tttgcgcccg ctgctcaaaa 300
aatacgtgaa tottaaaana togatogooa entntttoac agootgttoo taaagttaan 360
ggaatttttt caaaaacaac cgattctcnt ggaacacttc c
<210> 729
<211> 530
<212> DNA
<213> Homo sapiens
<220>
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<221> misc feature
 <222> (7)
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<222> (60)
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ccgctctaga actagtggat cccccgggct gcaggaattc ggcacgagcc gccatcttcc 120
agtaattcgc caaaatgacg aacacaaagg gaaagaggag aggcacccga tatatgttct 180
ctaggccttt tagaaaacat ggagttgttc ctttggccac atatatgcga atctataaga 240
aaggtgatat tgtagacatc aagggaatgg gtactgttca aaaaggaatg ccccacaagt 300
gttaccatgg caaaactgga agagtctaca atgttaccca gcatgctgtt ggcattgttg 360
taaacaaaca agttaagggc aagattettg ccaagagaat taatgtgegt attgagcaca 420
ttaagcactc taagagccga gatagcttcc tgaaacgtgt gaaggaaaat gatcagaaaa 480
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<211> 375
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<213> Homo sapiens
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<221> misc feature
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<222> (333)
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tggacgctac tccggacgca aagctgntca tcgtaanaga acattgaatg ntggcacctc 120
naanngcccc tacagccatg cnctggtggc tgggaattga accgctaccc ccgcaaatga 180
nengetgeen tggggeanga agaagntege caggaggtea aagatatant ettttgtgaa 240
ngtgtgtnac tacaatcacc tnatgcccnc aaggtactct gtgngatatt ccccttgggg 300
caaagctgta cgttcattag gntgtcttcc ganattcctg gctcttaaac gctnggcccg 360
aaggagnccc aggtc
                                                                   375
<210> 731
<211> 207
<212> DNA
<213> Homo sapiens
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<222> (177)
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<222> (187)
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (207)
<223> n equals a,t,g, or c
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gcgccgctgc gaagggagcc gccgccatgt ctgcgcatct gcaatggatg gtcgtgcgga 60
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tgaaggcccg caattcette cgntacaacg gactgattea ccgcaagact gtgggcntgg 180
ageeggnage egaeggeaaa ngtgten
<210> 732
<211> 702
<212> DNA
<213> Homo sapiens
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gaagtggtaa cccgagaata caccatcaac attcacaagc gcatccatgg agtgggcttc 120
aagaagegtg caccteggge acteaaagag atteggaaat ttgccatgaa ggagatggga 180
actocagatg tgcgcattga caccaggotc aacaaagctg tctgggccaa aggaataagg 240
aatgtgccat accgaatccg tgtgcggctg tccagaaaac gtaatgagga tgaagattca 300
ccaaataagc tatatacttt ggttacctat gtacctgtta ccactttcaa aaatctacag 360
acagtcaatg tggatgagaa ctaatcgctg atcgtcagat caaataaagt tataaaattg 420
caaaaaaaa aaaaaagggc ggccgctcta gaggatccaa gcttacgtac gcgtgcatgc 480
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tcgtgactgg gaaaaccctg cgttacccaa cttaatcgcc ttgcagcaca tcccctttcg 600

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ccagctgcgt aataacgaan aggcccgnac cgatcgcctt tccacagttg cgcancctga 660
 atggcgaatg gacgcgcctt taccgngcan taagcgccgc gg
 <210> 733
 <211> 441
 <212> DNA
 <213> Homo sapiens
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 <221> misc feature
 <222> (22)
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<222> (62)
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<222> (185)
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  <222> (212)
. <223> n equals a,t,g, or c
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 <222> (310)
 <223> n equals a,t,g, or c
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 <222> (356)
 <223> n equals a,t,g, or c
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 anctagtggt tcccccgggc tgcaggattt cggcacganc ncgtgcagat tcgagcanag 120
 gagognaagg gaacgtcatc gtttggaaag cntcgcaata agacgcacac gttgtgccgc 180
 cgctntggct ctaaggccta ccaccttcag angtcgacct gtggcaaatt tggctaccct 240
 gccaagcgca agagaaagtn taactggagt gccaaggcta aaagacgaaa taccaccgga 300
 actggtcgan tgaggcacct aaaatttgta taccgcagat tcaggcatgg tttccntgaa 360
 ggaacaacac ctaaacccaa gagggcagct gttgcagcat ccagttcatc ttaagattgt 420
 caacgattag tcatgcaata a
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 <211> 379
 <212> DNA
 <213> Homo sapiens
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 <221> misc feature
 <222> (323)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (324)
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<221> misc feature
<222> (342)
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<221> misc feature
<222> (346)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (375)
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cacacgttgt gccgccgctg tggctctaag gcctaccacc ttcagaagtc gacctgtggc 120
aaatgtggct accctgccaa gcgcaagaga aagtataact ggagtgccaa ggctaaaaga 180
cgaaatacca ccggaactgg tcgaatgagg cacctaaaaa ttgtataccg cagattcagg 240
catggattcc gtgaaggaac aacacctaaa cccaagaggg cagctgttgc agcattccag 300
ttcatcttta agaatgtcaa cgnntttagt catgcaataa antgtnctgg ggttttaaaa 360
aattaaaaga aaagnaaaa
<210> 735
<211> 187
<212> DNA
<213> Homo sapiens
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<222> (172)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (176)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (177)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (179)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (185)
<223> n equals a,t,g, or c
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aaattgaaat cagccagcac gccaagtaca cttgctcttt ctgtggcaaa accaagatga 120
agagacgage tgtggggate tggcactgtg gtteetgeat gaagacagtg gntggnngng 180
cctgnac
<210> 736
<211> 576
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (94)
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<221> misc feature
<222> (334)
<223> n equals a,t,g, or c
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<222> (340)
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<222> (371)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (397)
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<222> (409)
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<222> (429)
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<222> (440)
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<223> n equals a,t,g, or c
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<222> (553)
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<400> 736
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ggtcatcgta ttgaggaagt tcctgaactt cttntggtag ttgaagataa agttgaaggc 120
tacaagaaga ccaaggaagc tgttttgctc cttaagaaac ttaaagcctg ggaatgatat 180
caaaaaaggtc tatgcctctc agcgaatgaq agctgggcaa aggcaaaatg gagaaaccgt 240
cgccgtatcc agcgcagggc ccgtgcatca tctataatga ggataatggt atcatcaagg 300
ccttccagaa acatccctgg aattactctg cttnaatgtn aagcaagctg aaacattttg 360
naagettget neetggtggg geatgtgggg aegtttnegg cattgggang gaaatggett 420
ttccgggant ttaganggan tgtnacgggc antgggcgta aagcgntttc cctccaagng 480
ttaactacan tetteecagg caccaagatg gattaatana gatettggca gaatetggaa 540
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<210> 737
<211> 297
<212> DNA
<213> Homo sapiens
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<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (243)
<223> n equals a,t,g, or c
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<222> (254)
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<221> misc feature
<222> (261)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (266)
<223> n equals a,t,g, or c
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<222> (275)
<223> n equals a,t,g, or c
<400> 737
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ctggcaaaaa tgtcactttg cctgctgtat tcaaggctcc tattcgacca gatattgtga 120
actttqttca caccaacttq cqcaaaaaca acagacagcc ctatgctgtc agtgaattaq 180
caggicatea gactagiget gagicitigg glactiggeag agetigget egaatteeca 240
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<223> n equals a,t,g, or c

ganttcgagg tggngggact naccgntctg gccanggtgc ttttggaaac atgtgtc

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<210> 738
<211> 354
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (26)
<223> n equals a,t,g, or c
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<222> (74)
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<222> (80)
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<222> (120)
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<220>
<221> misc feature
<222> (148)
<223> n equals a,t,g, or c
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<221> misc feature
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<221> misc feature
<222> (286)
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<221> misc feature
<222> (303)
<223> n equals a,t,g, or c
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<222> (329)
<223> n equals a,t,g, or c
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<222> (351)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (353)
<223> n equals a,t,g, or c
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actctgaagg gacncacagn tatngtgaag ggccccanag gaaccctgcg gagggacttn 120
aatcacatca atgtataact cagccttntt ggaaagaaaa aaaagaggct ccgggttgac 180
aaatggtggg gtnacagaaa ggaactggct accgttcgga ctatttgtag tcatgtacag 240
aacatgatca agggtgttac actgggcttc cgttacaaga tgaggnctgt gtatgctcac 300
ttncccatca acgttgttat ccaagagant gggtctattg ttgaaatcca nant
<210> 739
<211> 504
<212> DNA
<213> Homo sapiens
<400> 739
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ategacgcag cgtccccact tggttgaagt tgacatctga cgacgtgaag gagcagattt 120
acaaactggc caagaagggc cttactcctt cacagatcgg tgtaatcctg agagattcac 180
atggtgttgc acaagtacgt tttgtgacag gcaataaaat tttaagaatt cttaagtcta 240
agggacttgc tcctgatctt cctgaagatc tctaccattt aattaagaaa gcagttgctg 300
ttcgaaagca tcttgagagg aacagaaagg ataaggatgc taaattccgt ctgattctaa 360
tagagageeg gatteacegt ttggetegat attataagae caagegagte eteceteeca 420
attggaaata tgaatcatct acagectetg ceetggtege ataaatttgt etgtgtacte 480
aagcaataaa atgattgttt aact
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<210> 740
<211> 399
<212> DNA
<213> Homo sapiens
<400> 740
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679

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aagggtcgct ttgctgtaca tcgtattaca cctgaggagg ccaagtacaa gttgtgcnaa 180
gtgagaaaga tctttgtggg cacaaaagga atccctcatc tggtgactca tgatgcccgn 240
accatecget accedence ceteateaag ginaatgate catteatatt gattianaga 300
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 taactccatg atgatgnacg ggcgcaacaa cggcaagaag ctcatgactg tgcgnatcgt 120
· cnagcatgee ttegagatea tacgeetget cacaggenaa gaaccetetg caggteetgg 180
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 ctgttgana
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<213> Homo sapiens

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tgcgctgccc ctgggccgca agaagggagc caagctgact cctgaggaag aagagatttt 120
aaacaaaaaa cgatctaaaa aaattcagaa gaaatatgat gaaaggaaaa agaatgccaa 180
aatcagcagt ctcctggagg agcagttcca gcagggcaag cttcttgcgt gcatcgcttc 240
aaggccggga cagtgtggcc gagcagatgg ctatgtgcta gagggcaaag agttggagtt 300
ctatcttagg aaaatcaagg cccgcaaagg caaataaatc cttgttttgt cttcacccat 360
gtaataaagg tgtttattgg ttt
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 ggcagcette etcaaaaagt eegggaaget gaaagteece gaatgggtgg atacegteaa 120
 gctggccaag cacaaagagc ttgctcccta cgatgagaac tggttctaca cgcgagctgc 180
 ttccacagcg cggcacctgt acctccgggg tggcgctggg gttggctcca tgaccaagat 240
 ctatggggga cgtcagagaa acggcgtcat gcccagccac ttcagccgag gctccaagag 300
 tgtggcccgc cggntcctcc aagccctngg aggngctgaa aatggtggaa anggaccaag 360
 atggcggccc gcaaactgac acctcaggga caaagagatc tgnacagaat cgccgnacag 420
 gtggcagent gccancaaag aagcattaga nc
<210> 746
 <211> 114
 <212> DNA
 <213> Homo sapiens
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ctgtctgcaa accaatgtgc cgtgncagcc aaggacangg tgnactgtgg ctac
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<211> 165
<212> DNA
<213> Homo sapiens
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ggcacagcca cccagggcct gagtcctgtc cacaccccag gtgacggccg gctccacaag 60
geagtgageg tgggcccccg ggtgcacatc attgaggage tgcagatett ctcatcggga 120
cagecegtgg cagaatetge teetgggaca eccaeagggg ggetg
<210> 748
<211> 583
<212> DNA
<213> Homo sapiens
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<222> (46)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (291)
<223> n equals a,t,g, or c
<220> ·
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aagagcactg gactcoggaa ggacacagca ttgttggttt tgccatgtac tattttacct 120
atgacccgtg gattggcaag ttattgtatc ttgaggactt cttcgtgatg agtgattata 180
gaggetttgg cataggatca gaaattetga agaatetaag ceaggttgea atgaggtgte 240
aaaagaagag gtgcttctga tctgtccagt gaagaaggtt ngagacttgt taagaatcga 360
caaggagtot tgctaaaaat ggcaacntag gagtgaggaa tgcttgctgt agatgacaac 420
ctccattcta ttttagaata aaattcccca actttctntt gnttttctat gctggttggn 480
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ntnccntgtt ttgaaaattg aaggtcttgt tttaaaaggn ggc
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<212> DNA
<213> Homo sapiens
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tgaccggtcc ggaattcccg ggtcgaccca cgcgtccggg cgtgatgtct cacagaaagt 120
totocgotoc cagacatggg tocotogget toctgootog gaagegeana geaggeateg 180
tgggaaggtg aagagcttcc ctaaggatga cccgtccaag ccggtccacc tcacagcctt 240
cctgggatac aaggctggca tgactcacat cgtgcgggaa gtcgacaggc cgggatccaa 300
ggtgaacaag aaggagggtg gtggaggctg tgaccattgt anagacacca nccatggtgg 360
tttgtgggca ttgttngcta cgttggaaaa ccctcgangg ctccggaact tcaagaatn 419
<210> 750
<211> 507
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (475)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (497)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (499)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (503)
<223> n equals a,t,g, or c
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tactgtcttc agaaaactca tgatgatcct ggccatgaat gaaaaggata agaagaaaga 120
gaagaaatga agtgaccatc cagcctttcc caattagact tcctcctt ccacccctca 180
tttccttttt gcacacatta caggtggtgt gttctgtgat aatgaaaagc atcagaaaag 240
cttttgtact ttgtggtttc ctctattttg aattttttga tcaaaaaact gattagcaga 300
atatagtttg gagtttggct tcatcttcct ggggttcccc tcactccctt ttttggcaac 360
cccatctgta gcctcttcct ctactcaggc agtcgacccg ccacgatgag aagtgggacc 420
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ggatcccccg ggctgcaggt agcctgagct tagctcagcg ccggggcttn accaagacct 120
acactgttgg ctgngaggaa tgcacagtgg ntccctgntt atccatcccc tgcaaactgc 180
agagtggcac tcattgctng tggacggacc agctnctnca aggctntgaa aagggcttnc 240
agnocceptca cettgentge etgecteggg agecaggget gggeacetgg cagtneetge 300
ggtcccagat agcctgaata ntgnccggag nggaagctga agcctgcaca gtgtncaccc 360
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aaaaaaaaa acctg
<210> 752
<211> 591
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<221> misc feature
<222> (240)
<223> n equals a,t,g, or c
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<222> (570)
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<222> (572)
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gcttctggca tcctgttgtt gctgtggctg atagccccca gcagggcctg cacctgtgtc 120
ccaccccacc cacagacgge ettetgcaat tecgaceteg teateaggge caagttegtg 180
gggacaccag aagtnaacca gaccacctta taccagcgtt atgagatcaa gatgaccaan 240
atgtataaag ggttccaagc cttaggggat gccgctgaca tccggttcgt ctacacccc 300
gccatggaga gtgtctgcng atactttcac aggtcccaca accgnagcga ggagtttctc 360
attgntggaa aactgcagga tggacttttg cacatcacta cctgcanttt tgtggctccc 420
tggaacagcc tgagcttagc tcagcgccgg gncttnacca agacctacac tgttggctgn 480
gaggaaatgc acaagtgctt ccctgtttat ccatcccctg caaactgcag agtgggcact 540
cattgcttgt aggacngacc agctcctacn angctcttna aaaggncttt c
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<211> 547
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cacagaagga ttccgaggct ggaatggaca gtgccttgat gtggacgagt gcctggaacc 120
aaacgtctgc gcaaatggtg attgttccaa ccttgaaggc tcctacatgt gttcatgcca 180
caaaggctat accoggactc cggaccacaa gcactgtaga gatattgatg aatgtcagca 240
agggaatcta tgtgtaaacg ggcagtgcaa aaataccgag ggctccttca ggtgcactgt 300
ggacaggggt taccagctgt cggcagctaa agaccagttt gaagacattg atgaatgcca 360
caccytcatc totyttyctc atyggcatyc aagaacacty aagototttt ccatytyttt 420
tttgaccang gttacagaac atctgggctt gganacactg tgaaaaattt caatgaatgc 480
ttggaagana aaatttttgc canaaaagaa antgctttat actgcagggt cctatgatgt 540
cttgtcc
<210> 754
<211> 384
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (374)
<223> n equals a,t,g, or c
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gctcggctcc agcgccatgg cgccctccag gaagttcttc gttgggggaa actggaagat 60
gaacgggegg aagcagagtc tgggggagct catcggcact ctgaacgegg ccaaggtgcc 120
ggccgacacc gaggtggttt gtgctccccc tactgcctat atcgacttcg cccggcagaa 180
gctagatccc aagattgctg tggctgcgca gaactgctac aaagtgacta atggggcttt 240
tactggggag atcagecetg geatgateaa agactgegga eeaegtgggt ggteetgggg 300
cactcanaga gaagcatgtc tttggggaat cagatgagct gattgggcag aaagtggccc 360
                                                                   384
atgctctggc aganggactc ggat
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<220>
<221> misc feature
<222> (217)
<223> n equals a,t,g, or c
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<222> (57)

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  <222> (240)
  <223> n equals a,t,g, or c
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 <221> misc feature
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^{\prime} <223> n equals a,t,g, or c
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 <222> (252)
 <223> n equals a,t,g, or c
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 <221> misc feature
 <222> (253)
 <223> n equals a,t,g, or c
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 tgtagatctt tgaagactct gattctctga gactgaggag agatgtctta ccagcagcan 60
 cagtgcaage agecetgeca gecaceteet gtgtgcecca egecaaagtg eccaagagee 120
 atgtccaccc ccgaagtgcc ctgagcctta cctgcctcct ccttgtccac ctgagcattg 180
 cccacctcca ccttgccagt ataaatgccc tcctgtngca accataccac cctggcagen 240
 gaanttcccc cnn
 <210> 756
 <211> 183
 <212> DNA
 <213> Homo sapiens
 <220>
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 <222> (5)
 <223> n equals a,t,g, or c
 <220>
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 <222> (9)
 <223> n equals a,t,g, or c
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 <222> (48)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
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<223> n equals a,t,g, or c
 <220>
<221> misc feature
<222> (79)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (83)
<223> n equals a,t,g, or c
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<222> (108)
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<220>
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<222> (141)
<223> n equals a,t,g, or c
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·<222> (144)
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ggcanaaana aggtaggaat aaggctagac ctttaacttc cctaaggnat acttttntag 60
ctaccttctg ccctgtgtnt ggnacctaca tccttaatga ttgtcctntt acccattctg 120
gaattttttt ttttttaaaa naantnonga aagcattttg aaaaaaaaaa aacaaaaaaa 180
aag
                                                                183
<210> 757
<211> 99
<212> DNA
<213> Homo sapiens
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<222> (12)
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<223> n equals a,t,g, or c
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<222> (26)
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<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (77)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (79)
<223> n equals a,t,g, or c
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<222> (82)
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ageetttaat anateatata ggaaantggt agntgeagta eggtnggaat teegggtgae 60
tcagcgtccg ggattgnanc anctgggatt ggagtttgg
<210> 758
<211> 60
<212> DNA
<213> Homo sapiens
<220>
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<222> (36)
<223> n equals a,t,g, or c
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<222> (38)
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 <222> (40)
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 <222> (45)
 <223> n equals a,t,g, or c
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 <221> misc feature
 <222> (46)
 <223> n equals a,t,g, or c
 <400> 758
 <210> 759
 <211> 66
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 <223> n equals a,t,g, or c
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 <221> misc feature
 <222> (65)
 <223> n equals a,t,g, or c
 <220>
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 <223> n equals a,t,g, or c
 <400> 759
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<210> 760
 <211> 487
 <212> DNA
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<222> (433)
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<222> (473)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (475)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (477)
<223> n equals a,t,g, or c
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ccaggcggac aaagttcagt gtcgggaatt ttccccgtga cattcactgg ggcatgagat 120
tttggaagaa gttttttact ttggtttagt cttttttcc ttccttttta ttcagctaga 180
atttctggtg ggttgatggt agggtataat gtgtctgtgt tgcttcaaat tggtctgaaa 240
ggctatectg ctgaaagtcc tgctttccta tctagcattt atttctctgg caaacttttc 300
tttctttct tttttaaagt aaacttgtgt attgagctta actgtatttc agtatttcca 360
gcttatgtgt acattattcc aatgataccc aacagttatt tatattttnt aacaaattca 420
cagtctgaat gangacttta tttcatggat tataataagg aatgaggtaa ttngngnctc 480
acattca
<210> 761
<211> 422
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (253)
<223> n equals a,t,g, or c
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<222> (297)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (350)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (353)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (382)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (403)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (406)
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gggtggggct gtgagctctt aatttgtttt tgattctgaa aaactctgct tcctggcatc 120
caggagttag agattgagcc tttcatcttc tttctcaaaa ctagtttttg atgctttctt 180
tcatgggaat agtcactttt ttatttagta aatcgcattg ctggaaccac caaggatgtg 240
gaatgtcctt gantgtatta tttatgcaag tcacagtcac gtttgccatc atggcantat 300
ttgaaacact aataatgtgt ttttactttt ttatccccgt taaaatgatn ttnaaaagga 360
aaaaggtggt tatagcccct anaatttctg ggtccaaatt atnccnaaaa tttcctaaaa 420
aa
                                                                   422
<210> 762
<211> 375
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (279)
<223> n equals a,t,g, or c
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<220>
 <221> misc feature
 <222> (315)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (373)
 <223> n equals a,t,g, or c
 <400> 762
 tttgaccact tgccaagtcc ctgtctcttt cagacacaga caagcttcat ttaaattatt 60
 tcaactgatg aagtaacaat aaagttataa atgataatga tcagatgaaa taatttataa 120
 ctttattgtt acttcatcag tgtttccttt tgaaaggtgt atgaattcat tacattttta 180
 ttctaatgta ttatctgtag attagaagat aaaatcaagc atgtatctgc ctatactttg 240
 tgagttcacc tgtctttata ctcaaaagtg tcccttaana gtgtccttcc ctgaaataaa 300
 tacctaaggg agtgnaacag tctctggagg accactttga gcctttggaa gttaagggtt 360
cctcagccac ctngt
<210> 763
<211> 372
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (261)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (301)
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<221> misc feature
<222> (320)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (338)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (344)
<223> n equals a,t,g, or c
<220>
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<221> misc feature

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<222> (354)
<223> n equals a,t,g, or c
<400> 763
caatatgtag cttactcttt ttttcccccc ttcttaaacc accagtggtt catttttaag 60
atttttcat caagagaaga ataactttac taaattttat ttctttattt gcaaaagaat 120
ctttattaaa acaaacaatc ttaactatgc acatgatgtg accagatcat cttgaaaata 180
ttcctcttta gtaggaactc tttgttttta actcttggta tggtcagaat ataatacttc 240
cataattact tataattcct ntccgggtac tgggggctat aaatacaact tttttaaatg 300
naattcatgg ttatcaaccn ggctccaagt accattangg ggtnccctat gggnaattac 360
cttgggaaag tc
<210> 764
<211> 195
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (60)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (71)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (86)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (94)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (146)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (151)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (153)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (183)
<223> n equals a,t,g, or c
<400> 764
cggacgcgtg ggcggacgcg tggggaaagg taagctctag cttaangtct angatttgtn 60
ctttganatt naggaaggta aggatnggtc agangatgta acttgatgtg agcagtaata 120
aacctgtntt aaatatcata ctgtgnatat ntnattgaaa atttatttca gagcggaaaa 180
acnttagcta aaatc
<210> 765
<211> 103
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (76)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (83)
<223> n equals a,t,g, or c
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<220>

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<222> (91)
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<220>
<221> misc feature
<222> (94)
<223> n equals a,t,g, or c
<400> 765
attaataatg gataccattc taaacaagtn aatccaagtt aagcccgtta aggagaaaga 60
aattaaggtt agcggntcat gtncaagctg ngtntgaaag tgg
<210> 766
<211> 538
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (285)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (316)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (327)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (379)
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<220>
<221> misc feature
<222> (436)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (441)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (445)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (450)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (474)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (504)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (516)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (520)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (522)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (526)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (534)
<223> n equals a,t,g, or c
<400> 766
cccgcgcggg cgcaggcggc cggaatggcg gggcccggct ggggtccccc gcgcctggac 60
ggcttcatcc tcaccgagcg cctgggcagc ggcacgtacg ccacggtgta caaggcctac 120
gccaagaagg acactcgtga agtggtagcc ataaagtgtg tagccaagaa aagtctgaac 180
aaggcatcgg tggagaacct cctcacggag attgagatcc tcaaggcatt cgacatcccc 240
acattgtgca gctgaaagac tttcagtgtg agctgggggc ggggncgctg ccaaaaggag 300
tggagaagga catctntttc aggccgnctc tctgcctctt aaaacaacag ttgggaacag 360
```

```
ttgaaccaat taatcttanc ttcaatccat tgggaagttt ttttgccggc caaggggggg 420
gccggaaacc ttggtncttc nggcntttcn aatcccaatt aaaccccggc caanggaatt 480
ttcttggccc cttgaaagaa aaanggtttg ggcccncccn tnggtncctt tccnaatg
<210> 767
<211> 415
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (350)
<223> n equals a,t,g, or c
<400> 767
ctttcccaag ggaaacactc agctttctat agaaaattgc actttttgtc gagtaatcct 60
ctgcagtgat acttctggta gatgtcaccc agtggttttt gttaggtcaa atgttcctgt 120
atagtttttg caaatagagc tgtatactgt ttaaatgtag caggtgaact gaactggggt 180
ttgctcacct gcacagtaaa ggcaaacttc aacagcaaaa ctgcaaaaag gtggtttttg 240
cagtaggaga aaggaggatg tttatttgca gggcgccaag caaggagaat tgggcagctc 300
atgcttgaga cccaatctcc atgatgacct acaagctaga gtatttaaan gcagtggtaa 360
atttccagga aagccagaag ttaaaggcca aaattgtaaa tcagtcgaga tcggg
<210> 768
<211> 425
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (351)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (381)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (389)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (422)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (423)
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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c
<400> 768
ctttgtacag gggctcagtt cagggaagag ttgagcttct ctctgagggg tccctagggg 60
gacccctcag gccaggccct gatccagttc tocagggtct ttctcagggt caggtccatg 120
gggagaccat ggggtgcttg tctgacactg acctcgccct gctgagtccc cccatcagac 180
tggaagtttg tctccccgt gtgtgtcctg cactaaatgt ccaaaccctg atacaggatg 300
taatgcagag agggccacag gcacaaccca ggcctgacaa tcccgtatgt nggaagtaga 360
actgacccc aacacccaga ngtcatgtng aaatactcac ggtatacatg gaaaaaaaaa 420
annaa
<210> 769
<211> 256
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (34)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (60)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (83)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (85)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (112)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (120)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (151)
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<220>
<221> misc feature
<222> (163)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (200)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (211)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (235)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (250)
<223> n equals a,t,g, or c
<400> 769
attctagatg tagcttgtgc agatgtagca gganaatagg aaaacctacc atctcagtgn 60
gcaccagctg gcctcccaaa ggngnggcag ccgtgcttat atttttatgg tnacaatggn 120
cacaaaatta ttatcaacct aactaaaaca ntccttttct ctnttttcct ggaattatca 180
tggagttttc taattctctn ttttgggaat ngtagattgt ttttgaaatg ctttnacgat 240
gttaaaatan tttatt
                                                                   256
<210> 770
<211> 316
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (158)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (173)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (200)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (228)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (266)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (267)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (281)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (284)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (291)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (294)
<223> n equals a,t,g, or c
<400> 770
ggnagaggtt caacgatgtg gtgtggcatg taagctggtc catcanagcc aacatcctgg 60
ctgtctctgg tggagacaat aaggaggagt tacagatgca gccacagatt gatcatctgc 120
ctttaacgtg aatcggagat gctttgtaat ctactgtncc agctgaagca ctncatgtta 180
```

```
cgaggaagaa actacaagtn atgttcaaat ctattttggg tcattttnat gtacctttgg 240
 gttcaggcat tatttggggg gttttnnttc caaaggaact naantaaagt natnttgctt 300
 attaaaaaaa ggaaaa
 <210> 771
 <211> 68
 <212> DNA
<213> Homo sapiens
<220>
<221> misc feature
 <222> (8)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (32)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (36)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (55)
<223> n equals a,t,g, or c
<400> 771
caaaagcngg agcnccaccg cnggcgaccg cnctanaact agtggatccc ccggnctgca 60
ggaattca
                                                                   68
<210> 772
<211> 258
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (17)
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```
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (42)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (60)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (61)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (139)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (155)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (189)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (225)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (235)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (250)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (257)
<223> n equals a,t,g, or c
<400> 772
nttgggtcat ttccacatgc tttattccag caatcaaaat aattaaaaac atctcaaatt 120
attatacaca tacaaaatng gtacagagtc ttttncttcc tcccacccct agggggaaaa 180
actgctttnt gctttgggaa gttgtctctg aaacccgggg acagnggacg caggncagac 240
taggaggan ccgggang
<210> 773
<211> 587
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (535)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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aaaaaaaaa aaanannana aanaantat
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ttgtng
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tttactggct gtatgccagc tgctgacagt ctataagtct taatagagat ggagtagagg 240
agetgaaggt tggcatetge teattgatga caactatgtt tacaatatgt tgtggactag 300
ttggggcact gaggcaggag aatcacgtgg agcccacggg ttcaagacca gcctgggaaa 360
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tectaaacta ecaaacetge attaaaaatt teggttgggg egacetegga geagaaceea 180 acctecgage agtacatget aagactteac cagteaaage gaactactat acteaattga 240 tccaataact tgaccaacgg aacaagttac cctagggata acagcgcaat cctattctag 300 agtccatatc aacaataggg tttacgacct cgatnttgga tcaggacatc ccgatngtgc 360 agccgctatt aaaggttcgt ttgttcaacg attaaagtcc tacgtgatct gagttcagac 420 cggagtaatc caggtcggtt tctatctact tcaaattcct ccctggaaaa nnagaagngg 480 nna <210> 779 <211> 389 <212> DNA <213> Homo sapiens <220> <221> misc feature <222> (261) <223> n equals a,t,g, or c <220> <221> misc feature <222> (325) <223> n equals a,t,g, or c <220> <221> misc feature <222> (337) <223> n equals a,t,g, or c <220> <221> misc feature <222> (362) <223> n equals a,t,g, or c <220> <221> misc feature <222> (367) <223> n equals a,t,g, or c <220> <221> misc feature <222> (389) <223> n equals a,t,g, or c <400> 779 ccctcttccc ggctccagct ccgccgccag ctccagcctt tgctccccct cccaaagtcc 60 coteccegga geggagegea cetagggtee etetteegte ecceeagece agetaceegt 120

tcagaccagc agcctcgggg ggcacccccc cgccagcctg cctccctccc gctcagccct 180 gccaggttcc cccagccatg aatctcttcc gattcctggg aaaactctcc caactcctcq 240 ccatcatctt gctactgctc naaatctgga attcccgctc gtgcgccgaa attcaggaaa 300 aaaacagtcc cgtttggtgt ggggntttca atggccnaat ttgaaatcct ttcacaataa 360

tntttantct aaaaattttt ttaaagggn

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tataaaatat tingitaaat attiattaan giggactata gantgcaaac inccattinc 180
cngntaaact tgtttttaaa ttatggccnt aggtaaccca tatngtaggg tattaatttc 240
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tgaatccacc cgagnttggc ctcccaagtg gctgggcatt ataggcgtga gcactcacgt 120
concectoa aaatnecata ttoaaagaag caatttoagt tootttotaa gotttetnag 180
tnaagggget ceaetgaett eetaggeeet gtaaatttaa aecagtettt aaggttttge 240
caggaaagtt cccttctttc caagtgggtt tttccaaatg ggcacaatgg caagcnanac 300
agaggangaa acattaaaaa aannaaaaaa aatttggggg ggggnncc
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atotgatgaa aaggtoanac tnaaacgoot tgcacggott ctcggottga tcacagotcc 120
ctaggtaggt naccacagag nngncncttc tagtgagcct
                                                                   160
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<212> DNA
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cacagtggct gcctgcctcc gggagggaag gagagggagg gtgggtgggt ggganggggc 180
cttcctccag ggaatgtgac tctcccaggc cccagaatag ctcctggacc caagcccaag 240
gcccagcctg ggacaaagct ccganggtcg gctggccgga gctattttta cctcccgcct 300
cccctgctgg tgcccccacc tggacgtctt gctgcagagt ctgacactgg attnnnaaaa 360
nctnaaaang aaccetggta cecaattetg ggncceggne ctaanetegg neceaaccea 420
tcatctgtgg acaatggagt ctggaataaa tgctgtttgt canatcaaca aaaaaaaaaa 480
aaaaggggng gccgctttag aggattcaaa gcttaagtaa nggtgcatgn gaagttcana 540
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caatgaaggt gaaggccggc gcgctcgccg gccgaggtgg gatcccgagg cctctccagt 120
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 gcacgtgtta ggacccgaaa gatggtgaac tatgcctggg cagggcgaan cagaaggaaa 240
ctctggtgga ggtccgtagc ggtcctgacg tgcaaatcgg tcgtccgacc tgggtatagg 300
 ggcgaaagac taaatcgaac catcttagta agctggtttc cctccgaaan tttccctcaa 360
 gataagcttg gcgctctcgc aagaccccga aggaaccccn gncanggaat ttttatccgg 420
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cttggtcctc atcttggtcc cttccaatct gaaacctcgt gcctggctcg tctgccacct 120
acatttctct ttccagctgc tgttttgtaa aaagaaaaag aaaaaagaag cccaaactag 180
tgagagtaat atctaattat ctcattttt gtaggtctgt gataaagaac ttagtcatcc 240
cttccacctc ctactgtgaa gaacagaccc tgggtcccac actgaaatcc cctctagtca 300
cccattecca cccccaggg agetgectec caggcagggg gtgcagaaaa tgattgatgg 360
gctggggaac cctggagagc ctcgactccg gaagtctcaa ggtgcctcct cctctcctta 420
gctggcccgt tggttttctg agcagggggc tgaactgtga acaagtcaga caaataaagc 480
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<211> 293

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cagaagagga aaaaaaaact acaaaaaaca aaacattgaa ggttgatatt ttatgtggaa 120
naacatttga attgaattca gaatttttct gaaggtgtan atactttttt tttttttna 180
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etgegegen ceeceagtee egeacengtt eggneeagge taagttagee etnaceatge 120
cggt
                                                                  124
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ctggcaaaga tggaaccant ggacatccag gtgccattgg accaccaggg cctcgaggta 120
acagnggtga aagnggatot nagggotoco cagggocacn cagggocacc agggocotno 180
tggnacctcc tggtgcccct ggtccttgct gtggtggtgt tngagccgct gccattgctg 240
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<223> n equals a,t,g, or c
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<221> misc feature
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<222> (113)
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<221> misc feature
<222> (116)
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<220>
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<222> (119)
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<400> 791
aaaaaaaaaa aaaaaaaggg gcggccgttt tanaggatcc aagnttacgt acncgngcnt 120
gcaacgtca
<210> 792
<211> 267
<212> DNA
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<222> (250)
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<222> (265)
<223> n equals a,t,g, or c
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<222> (267)
<223> n equals a,t,g, or c
<400> 792
ggcacgagcg gccttgagcg cgacgaagac gtgtaggcct gctttccgag gggcgagcgc 60
ggcgccgcgg ggaggagggc ctgcgcgcag tcccgggcgc gttctagggc gccatgctgc 120
```

```
gggaagtete gegegattag tggggaggte tegeggette tggetaettg gtggegaggt 180
gaagagette tgcaggtget gggggcggeg aacgeggegg gaaagaaaaa aaaaaaaaa 240
aaaaaanctn ggnaagtatt tttanan
<210> 793
<211> 453
<212> DNA
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<222> (443)
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gccgtagnag ccggggacag gtcagtccga gacgagagaa gcggtcagtg ttgtacagtg 120
ttttgggcat gcacgtgata ctcacacagt ggcttctgct caccaacaga tgaagacaga 180
tgcaccaacg aggctgatgg gaaccatcct gtagaggtcc atctgcgttc agacccagac 240
gatgccagag ctatgactgg gcctgcaggt gtggcgccga ggggagatca gccatggagc 300
agccacagga ggaagcccct gaggtccggg aagaggagga gaaagangaa gtggcagaag 360
cagaaggagc cccagagctc aattggggac cacagcatgc acttecttec ageagctaca 420
cagactetee eggageteet egneaacett atg
<210> 794
<211> 141
<212> DNA
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caacgaccgc gtttncntgg cacggggtcn ggcccgcctg gccctgggaa agcntcccac 60
ggngggggg cgccggtctc ccggagcggg accgggtcgg aggatggncg agaatcacga 120
gcgacggtgg tngtggngtg t
<210> 795
<211> 167
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<222> (56)
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<221> misc feature
<222> (146)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (149)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (164)
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ngeggeacag cageagegae geageggega canteagage agggaggeeg enceacetge 120
gggccggccg gagcgggcag ccccangenc cctccccggg cacnege
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<222> (79)
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<221> misc feature
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<221> misc feature
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<221> misc feature
<222> (124)
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<220>

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<222> (126)
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<221> misc feature
<222> (131)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (146)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (192)
<223> n equals a,t,g, or c
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<221> misc feature
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (228)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (241)
<223> n equals a,t,g, or c
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<222> (242)
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<221> misc feature

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<222> (260)
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<222> (280)
<223> n equals a,t,g, or c
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<222> (328)
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aatteggnan caegenaegn catacegtgg cagnttetgt ntgagaegaa catnengnag 60
notocactca gotaatgtna caacatgngn notacttoto notnnotttt acannnacag 120
gannnnggcc nnagttaata tatcongtgt acctcactgt ccaatatgaa aaccgtaaag 180
tgccttatag gnatttgcgt aactaacaca ccctggttca ttganctnta cttgctgaag 240
nngnaaaaga caggataagn tttcaatagt ggcataccan atgggacttt tgatgaaatg 300
aatatcaata ttttctgcaa ttccatgngc t
                                                                   331
<210> 797
<211> 699
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (521)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (564)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (589)
<223> n equals a,t,g, or c
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<222> (597)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (598)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (635)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (643)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (657)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (678)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (695)
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tagaaattga aacctggcgc aatagatata gtaccgcaag ggaaagatga aaaattataa 120
ccaagcataa tatagcaagg actaacccct ataccttctg cataatgaat taactagaaa 180
taactttgca aggagagcca aagctaagac ccccgaaacc agacgagcta cctaagaaca 240
gctaaaagag cacacccgtc tatgtagcaa aatagtggga agatttatag gtagaggcga 300
caaacctacc gagectggtg atagetggtt gtecaagata gaatettagt teaactttaa 360
atttgcccac agaaccctct aaatcccctt gtaaatttaa ctgntagtcc aaagaggaac 420
agctctttgg acactaggaa aaaaccttgt agagagagta aaaaatttaa cacccatagt 480
aggectaaaa geagecacca attaagaaag egtteaaget naacacccae tacetaaaaa 540
aatcccaaac atataactga actnctacac ccaattgggc caatctatna ccctatnnaa 600
gaactaatgg tagtataagt acatgaaaac cattnttctt cgnataagcc ttgcgtnaga 660
attaaaacac tgaactgnac attaaacagc caatntcta
                                                                   699
<210> 798
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<211> 138

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<221> misc feature
<222> (120)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (127)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (128)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
<400> 798
cccggcacag agtcgatgct caataaatgt gtgttgactg catgaatgac ctggaaaaaa 60
gggggnncc ccncccc
                                                            138
<210> 799
<211> 496
<212> DNA
<213> Homo sapiens
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<222> (9)
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<221> misc feature
<222> (414)
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<220>
<221> misc feature
<222> (442)
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<220>
<221> misc feature
<222> (443)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (485)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (490)
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cacactgina tgctagcctc acgaaactgg aataagcctt cgaaaagaaa tigtccttga 60
agettgtate tgatateage actggattgt agaacttgtt getgattttg acettgtatt 120
gaagttaact gttccccttg gtatttgttt aataccctgt acatatcttt gagttcaacc 180
tttagtacgt gtggcttggt cacttcgtgg ctaaggtaag aacgtgcttg tggaagacaa 240
gtctgtggct tggtgagtct gtgtggccag cagcctctga tctgtgcagg gtattaacgt 300
gtcaaggctg agtgttctgg ggaattctct agaggctggc aagaaccagt tggttttgtc 360
cttgcggggt ctgtcaaggg ttggaaatcc caagccgtag gacccagttc cctnccttaa 420
ccgaagtett tggccaaaca cnngggccgt aactggcctt gagttggaac ggttgcataa 480
gccgnaaagn atcaac
                                                                   496
<210> 800
<211> 516
<212> DNA
<213> Homo sapiens
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<222> (29)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (44)
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<220>
<221> misc feature
<222> (80)
<223> n equals a,t,g, or c
<220>
<221> misc feature
·<222> (107)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (122)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (149)
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<220>
<221> misc feature
<222> (157)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (164)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (166)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (169)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (173)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (183)
<223> n equals a,t,g, or c
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<220>
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<222> (188)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (190)
<223> n equals a,t,g, or c
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<221> misc feature
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<221> misc feature
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<220>
<221> misc feature
<222> (208)
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<220>
<221> misc feature
<222> (220)
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<221> misc feature
<222> (256)
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<221> misc feature
<222> (270)
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<220>
<221> misc feature
<222> (273)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (275)
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 <222> (294)
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 <220>
 <221> misc feature
 <222> (296)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (335)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (336)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (341)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (362)
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<222> (370)
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<221> misc feature
<222> (487)
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<220>
<221> misc feature
<222> (500)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (501)
<223> n equals a,t,g, or c
<400> 800
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gctgaaaaag gngggggga gccaattann acgcccagac ggantaaccc caggccccgc 60
cacaccaecc cttgccaaan tcatctgcct gctccccggg gggagangac cgccggcctc 120
tnctactage ccaecageee accagggana aaataaneea tganangeng egneegeeae 180
congiginon canteccone ettecegnit ecettagaan eetgeegegi eetateteat 240
gacgeteatg gaacenettt etttgatetn etntntetta tetececete tttntngtte 300
taaagaaaat cattttgatg caaggtcctg cctgnnatca natccgaagt gctcctgcag 360
tnaccetttn cetggeattt etetteeaeg egacaagtet getagtgaga tettgeatga 420
ctcactttgt ttccaaaacc cggggctatt ttgcatctca agtttcctgg ggcctgcttc 480
ctgtgtncca cttaagggcn nctgggccaa gactgt
<210> 801
<211> 284
<212> DNA
<213> Homo sapiens
<220>
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<222> (1)
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<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<400> 801
naageneeg gngaacttgg ggaaggeneg cetgeaggta eeggteegga atteeeggt 60
atatatatag atatataga atatatagat atatatagat atatatagat atatagatat 240
atatagatat atagatatat atatatctgg ctcatgcatg aaaa
<210> 802
<211> 153
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (92)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (119)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (134)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (140)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (143)
<223> n equals a,t,g, or c
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cggacggctg tgtagcgcgt gggtgtaaga cttgcccaag tcccanagca cctcacctcc 60
cgaagccacc atccccaccc tgtcttccac anccgcctga aagccacaat gagaatgant 120
cacactgagg cctngatgtn ctntaatcac ttg
                                                                   153
<210> 803
<211> 383
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (271)
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<221> misc feature
<222> (301)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (370)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (374)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (375)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (383)
<223> n equals a,t,g, or c
<400> 803
caegtgagat taaaaccaat tttttcccca ttttttctcc ttttttctct tgctgcccac 60
attgtgcctt tattttatga gccccagttt tctgggctta gtttaaaaaa aaaatcaagt 120
ctaaacattg catttagaaa gcttttgttc ttggataaaa agtcatacac tttaaaaaaa 180
aaaaaaactt tttccaggaa aatatattga aatcatgctg ctgagcctct attttctttc 240
tttggatgtt ttggattcag tattccttta nccataaatt tttagcattt aaaaattcac 300
nggatggtac attaagccaa taaactggct ttaatggatt acccaaaaaa aaaaaaaaa 360
aaagggggn cgcnncagag ggn
                                                                   383
<210> 804
<211> 509
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (94)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (397)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (399)
<223> n equals a,t,g, or c
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<222> (401)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (434)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (478)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (501)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (504)
<223> n equals a,t,g, or c
<400> 804
ggcacgagct gggttgtcct ttgcatctgc acgtgttcgc agtcgtttcc gcgatgctga 60
ctctggagct cagcacagcc ctggagcacc aggngtacat tacttttctt gaagacctca 120
agagttttgt caagagccag tagagcagac agatgctgaa agccatagtt tcatggcagg 180
ctttggccag tgaacaaatc ctactctgaa gctagacatg tgctttgaaa tgattatcat 240
cctaatatca tgggggaaaa aataccagat ttaaattata tgttttgtgc tctcatttat 300
ttatcatttt tttctgtaca aatctattat ttctaggttt ttgtattaca tgatagacat 360
aaattgggtt atctcctcca ggcagtttgt cttttcnant nctccccctt caaccgtgtc 420
acaaagacca gacngtgtcg ggaaagtttt ttttctccgt attgttaaag gttccatnca 480
attaggttta ataaaggctt nttntccag
                                                                   509
<210> 805
<211> 753
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (648)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (668)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (718)
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<220>
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<222> (736)
<223> n equals a,t,g, or c
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ncaaacccac tccaccttac taccagacaa ccttagccaa accatttacc caaataaagt 60
ataggcgata gaaattgaaa cctggcgcaa tagatatagt accgcaaggg aaagatgaaa 120
aattataacc aagcataata tagcaaggac taacccctat accttctgca taatgaatta 180
actagaaata actttgcaag gagagccaaa gctaagaccc ccgaaaccag acgagctacc 240
taagaacagc taaaagagca cacccgtcta tgtagcaaaa tagtgggaag atttataggt 300
agaggegaca aacctaccga gcctggtgat agctggttgt ccaagataga atcttagttc 360
aactttaaat ttgcccacag aacctttaa atcccttgt aaatttaact gttagtccaa 420
agaggaacag ctctttggac actaggaaaa aaccttgtag agagagtaaa aaatttaaca 480
cccatagtag gcctaaaagc agccaccaat taagaaagcg ttcaagctca acacccacta 540
cctaaaaaat cccaaacata taactgaact cctcacaccc aattggacca atctatcacc 600
ctatagaaga actaatggta gtataagtaa catgaaaaca ttctcctncg cataagcctg 660
cgtcaganta aaacctgact gacaattaac agcccaattc tacaatcaaa caacaagnca 720
ttattaccct tactgncaac ccaaccagge atg
<210> 806
<211> 404
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (352)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (383)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (396)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (398)
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<223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (403)
 <223> n equals a,t,g, or c
 <400> 806
 ggaagaagga ngaaaagcag gaagctggaa aggaaggtac tgcaccatct gaaaatggtg 60
 aaactaaagc tgaagaggta ctttccataa atacctccca ctgattgaat cagtgtcttt 120
 aaagaaattt ctcaatcctt cagccggtga tagcacgttc ttaatgtctc tttttattgc 180
ctgtaatgtt attgcagatc cacatctctc gctcaactgt taatgtctca acctccagag 240
 gcaccccacc cagcacactg tcagtaaagg ggcagaatga aacagtgaga gttaagggta 300
caggaagaaa atttgcatgt ttgcaagtga ctagaatcag atagtaagtg gnggtgggtt 360
ttttttttta atcattatga aanagtggga agcttngnag gtna
<210> 807
<211> 428
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (89)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (164)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (198)
<223> n equals a,t,g, or c
<220>
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<222> (215)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (258)
<223> n equals a,t,g, or c
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<221> misc feature
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<221> misc feature
<222> (283)
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<222> (417)
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<220>
<221> misc feature
<222> (423)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (426)
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<400> 807
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engtteetee geetgtneen tgggggggee etnagaggga aggagaggtt teteacacea 60
 aggcagatgc tcctctggtg ggagggtgnt ggcccggcaa gattgaagga tgtgcagggc 120
 ttcctctcag agccgcccaa actgccttga tgtgtggagg ggangcaaga tgggtaaggg 180
 ctcaggaagt tgctccanga acagtagctg atganctgcc cagagtgcct ggctccagcc 240
 tgtaccettg gtatgcentg aacatntggt ttccccacce aantgegget aagtetettt 300
 ttccttggat cagccaggcg aaattggggc tttgacaagg aattttctaa ggaaaccttg 360
 ttaaccagac aaaacacaac cagggttaca gggggtatgn aagggttttc tgncccngga 420
 ggnttnag
 <210> 808
 <211> 403
 <212> DNA
<213> Homo sapiens
<220>
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<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (34)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (62)
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<220>
<221> misc feature
<222> (85)
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<220>
<221> misc feature
<222> (257)
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<220>
<221> misc feature
<222> (258)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (261)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (265)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (270)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (286)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (288)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (342)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (346)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (349)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (365)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (375)
<223> n equals a,t,g, or c
<400> 808
cnagococga ggggctctcg cttctggcgc caangeccgg ccgcgcgccg gccgggccga 60
cnccgctccg gggacagtgc caggngggga gtttgactgg ggcggtacac ctgtcaaacg 120
gtaacgcagg tgtcctaagg cgagctcagg gaggacagaa acctcccgtg gagcagaagg 180
gcaaaagctc gcttgatctt cattttcagt acgaatacag accgtgaaag ccgggcctca 240
egatecteet gacettnneg ntttneagen ggaggtgtea gaaaantnae cacagggata 300
actogottgt cgcggccaag cgttcatagc gacgtcgctt tnccangtnc gatgtcggat 360
cttcntatca ttgtnaagca gaattcacca agcgttggat tgt
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<211> 583
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (376)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (377)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (421)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (423)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (435)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (440)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (444)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (472)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (478)
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<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (481)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (488)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (565)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (571)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (573)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (581)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (583)
<223> n equals a,t,g, or c
tcgacccacg cgtccgggac gacagttagc tatgctgata cccttctgtg aggagttgaa 60
tttgaagacc acttggctgt ttcacaaaac cagaagtaat tacagggtgt tcctgaaaag 120
ccccatagtg attgagtctt caaaaccacc gattctgaga gcaaggaaga ttttggaaga 180
aaatctgact gtggattatg acaaagatta tcttttttct taagtaatct atttagatcg 240
ggctgactgt acaaatgact cctggaaaaa actcttcacc tagtctagaa taagggaggt 300
gggagaatga tgacttaccc tgaagtcctt cccttgactg cccgcactgg ggcctgttct 360
gtgccctggg agcatnntgc ccagctaagt ggggttcagg cagtgggcag ctttcccaat 420
nantcgattt ccatnccagn gganttaaaa ccagttggcc aaatttccaa gnccttgnaa 480
ntaaggantc catttaccaa cccgcggttt tgtggtcagt gccccaaggg ggtaggttga 540
agggggctta acaaacatgg aagtnggggg nanaagggat nan
<210> 810
<211> 272
<212> DNA
<213> Homo sapiens
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<220>
 <221> misc feature
 <222> (33)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (43)
 <223> n equals a,t,g, or c
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 <221> misc feature
 <222> (123)
 <223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (130)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (163)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (165)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (167)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (228)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (259)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (262)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (265)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (266)
<223> n equals a,t,g, or c
<400> 810
tttttttttt tttttggacg ttaaaggcat ttnattccag cgncttctag agagcttagt 60
gtatacagat gagggtgtcc gctgctgctt tccttcggaa tccagtgctt ccacagagat 120
tancctgtan cttatatttg acattettea etgtetgttg ttnanenace gtagettttt 180
acceptionat toccottoca actatetica gateticage ctootconct otegactitic 240
tccaaaggca ctgaccctng gnctnnactt tg
<210> 811
<211> 300
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (252)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (259)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (264)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (276)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (280)
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<223> n equals a,t,g, or c

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<400> 811
ggcagagnat aaaatcttaa agcactcata atatggcatc cttcaatttc tgtataaaag 60
cagatetttt taaaaagata ettetgtaac ttaagaaace tgggcattta aateatattt 120
tgtctttagg taaaagcttt ggtttgtgtt cgtgttttgt ttgtttcact tgtttccctc 180
ccagccccaa accttttgtt ctctccgtga acttaccttt ccctttttct ttctcttttt 240
tttttttgga anattaatng tttncaataa aatttncatn gccattaaaa aaaaaaaaa 300
<210> 812
<211> 478
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (232)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (294)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (325)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (336)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (409)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (427)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (445)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (460)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (468)
<223> n equals a,t,g, or c
<400> 812
gccaccttac taccagacaa ccttagccaa accatttacc caaataaagt ataggcgata 60
gaaattgaaa cctggcgcaa tagatatagt accgcaaggg aaagatgaaa aattatagcc 120
aagcataata tagcaaggac taacccctat accttctgca taatgaatta actagaaata 180
actttgcaag gagagccaaa gctaagaccc ccgaaaccag acgagctacc tnagaacagc 240
tgaaagagca cacccgtcta tgtagcaaaa tagtgggaag atttataggt tgangcgaca 300
aacctaccga gcctggtgat agctngttgt tccaanattg aatccttagt tccactttta 360
atttggcccc aaaaaccccc taattcccct tggttaattt taactgttng tcccaaaaaa 420
ggaaccngct ctttgggacc cttanggaaa aaaaccttgn ttaaaaaanaa ttaaaaaa 478
<210> 813
<211> 63
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (59)
<223> n equals a,t,g, or c
<400> 813
gccgcggtcc ttcagactgc ccggagagcg cgctctgcct gccgcctgnn tgnctgncnc 60
tga
                                                                   63
```

<221> misc feature

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<210> 814
<211> 73
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (37)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (58)
<223> n equals a,t,g, or c
<400> 814
ggcngacatt cagactgagc gtgcctacca aaagtanncg accatctttc anaacaanaa 60
                                                                   73
gagggtcctg ctg
<210> 815
<211> 102
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (91)
<223> n equals a,t,g, or c
<220>
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<222> (93)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (100)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (102)
<223> n equals a,t,g, or c
<400> 815
gctgccgcct gcctgcctgc cactgaggnt tcccagcacc atgagggcct ggatcttctt 60
tctcctttgc ctggccggga gggccttggc ngnccctcan cn
<210> 816
<211> 379
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (340)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (348)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (358)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (359)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (360)
<223> n equals a,t,g, or c
<400> 816
gctccacgag ggttcagctg tctcttactt ttaaccagtg aaattgacct gcccgtgaag 60
aggcgggcat aacacagcaa gacgagaaga ccctatggag ctttaattta ttaatgcaaa 120
```

cagtacctaa caaacccaca ggtcctaaac taccaaacct gcattaaaaa tttcggttgg 180

```
ggcgacctcg gagcagaacc caacctccga gcagtacatg ctaagacttc accagtcaaa 240
gcgaactact atactcaatt gatccaataa cttgaccaac ggaacaagtt accctaggga 300
taacagegea atectattet agagteeata teaacaatan ggtttaenae etegatgnnn 360
ggatcaggac attccaatg
<210> 817
<211> 500
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (148)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (158)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (185)
<223> n equals a,t,g, or c
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<222> (192)
<223> n equals a,t,g, or c
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<222> (201)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (215)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (238)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (240)
<223> n equals a,t,g, or c
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<220>

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<221> misc feature
<222> (251)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (259)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (262)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (283)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (293)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (336)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (339)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (345)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (350)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (354)
<223> n equals a,t,g, or c
<221> misc feature
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<222> (363)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (365)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (369)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (373)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (384)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (394)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (397)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (416)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (430)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (445)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (480)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (484)
<223> n equals a,t,g, or c
<400> 817
tegacecaeg egteeggeea cagecaeage caggetagee tegeoggtte eegggtggeg 60
cgcgttcgct gcctccttca gctccaggat gatcggccag aagacgctct actcctttt 120
ctccccage cccgccaaga agcgacangg ccccaagnce cgagccggcc gtcaagggga 180
ccggngtggc tngggttgct naagaaagcg gaatncgggg ggcatcccag ccaagaangn 240
cccggctggg naggagaanc tngggaacgc cggcctcctt ggncgctgaa ttnccgaaca 300
ttttggaacc ggattccaga ggaacaaagg gcccgnggnc cttgnttaan aatncggggg 360
congnaaang ttnccccttg gggntttttg gaanaanaac ctgggaaaga aagcanctta 420
agggggggn attttcgggg gaaancgtta tttttaatca aagctaaatt ggggattttn 480
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<210> 818
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<222> (104)
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ctcactaatg ggaacanaag ctggagctcc accgngtagg cggncggtct agaactagtg 120
tgatcccccg ggctgcagga attcggcncg agaggaaana gaaaccgtct gaactatgct 180
gnnngccate atnotnggcc teategennt tecateceta egeatgettt acatageana 240
cgaggtgacg atgccnccct taccatcaag atcanttgnc caccaatggt acttgaacct 300
acgagtacac ccgaccaccn ggtggacta
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<223> n equals a,t,g, or c
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<221> misc feature
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<222> (626)
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atctgttgtt ctgtggtcac agtgacctta gctacatagc agactttccc aaatgtattg 120
attacaaata aacagttgtt acttagcaag acctgaaaat atgtctgcag gtttctcctt 180
gaagcaaatg tgtgggatca ttgcatttcc agaaatctgc ctccttcacc ctccgttgac 240
agtatatgtc atgcctcact ttcttctagc tgagctttaa atcattagag cttaaattgt 300
cagategtte attgeettte cagggttatt tagtaaagtt tgttgaaaac aaaaacgeet 360
tttcttqqnt cttttttcag ttattttgaa ggccagcatc ctgattaaat gctgacacat 420
taatgaatga ccagcaacag ctttcagctc ttaaaaagac acttatattt gaatttacat 480
gctgggtacc tgggtccaat ggtggcaaaa ggccactntt cattaaaagg ggtcctccat 540
ttentanece caaggactte eteantttte aaattgggaa gggnacetaa aagggggtae 600
aattaaaacc ctggggtaaa gggggnaaaa aaaaaaaaa aaaaaaaa
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<210> 820
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<213> Homo sapiens
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<221> misc feature
<222> (238)
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<222> (284)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<220>
<221> misc feature
<222> (319)
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<220>
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<222> (370)
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<222> (396)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (428)
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<222> (465)
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cgatagaaat tgaaacctgg cgcaatagat atagtaccgc aagggaaaga tgaaaaatta 120
taaccaagca taatatagca aggactaacc cctatacctt ctgcataatg aattaactag 180
aaataacttt gcaaggagag ccaaagctaa aacccccaat aaaccttgaa cagtgaanaa 240
aaaaaaaaaa aaaaaaaaa aaaaaaaaaa aaacctcgag gtcnacggta tcnataacct 300
tgatatenaa tteggeaena geaaceetea tteeceaace Caegeeggag getgegeetg 360
caggacetgn etgacegatt ggtggateet etgaanatga acaegaetea ecaetgetea 420
ncgaggentg cttgageaaa atccgccaat tataaaaaaa aaacnetee
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<211> 432
<212> DNA
<213> Homo sapiens
<220>
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<222> (422)
<223> n equals a,t,g, or c
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<222> (425)
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ggcacgagag aaactgtgtg tgaggggaag aggcctgttt cgctgtcggg tctctagttc 60
ttgcacgctc tttaagagtc tgcactggag gaactctgcc attaccagct cccttgttgc 120
agaaggaagg ggaaacatac atttattcat gccagtctgt tgcatgcagg cttttttggct 180
tectacettg caacaaaata attgcaceaa etecttagtg eegatteege ecacagagag 240
tcctggagcc acagtctttt ttgctttgca ttgtaaggag agggactaaa gtgctagaga 300
ctatgtcgct ttcctgagct aacgagagcg ctcgtgaact ggantcaact gctttcaggg 360
aaaaagaaaa aaaaaaaaa aaaanccggg ggggggcccg gtaacccatt tccccctana 420
gnggnggggt tt
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<211> 428
<212> DNA
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<223> n equals a,t,g, or c
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<222> (367)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (382)
<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (425)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (427)
<223> n equals a,t,g, or c
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tcattagtga aagtggtctt ttatgtcctc ccagcagaca gacatcaagg atgagttaac 120
caggagacta ctcctgtgga ctgtggagct ctggaaggct tggtgggagt gaatttgccc 180
acaccttaca attgtggcag gatccagaag agoctgtctt tttatatcca ttccttggat 240
gtcattgggc ctctcccacc gatttcatta cggtgccacg catccatggg atctggggta 300
gtccggaaaa acaaaaggag ggnagacagc ctggtaatgg ataagatcct taccacagtt 360
ttcccanggg gaatacctta tnaanccttc aactttttt tttcccttaa gaattaaaac 420
ggggnana
                                                                   428
<210> 823
<211> 100
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (32)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (71)
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<213> Homo sapiens

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<221> misc feature
<222> (78)
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agntgaccca ntctccgncc ctccctgtct gcagctggta
<210> 824
<211> 173
<212> DNA
<213> Homo sapiens
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<222> (79)
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<222> (111)
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<221> misc feature
<222> (156)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (165)
<223> n equals a,t,g, or c
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gcccccatcc cgggaggana tgaccaagaa acagtcagct gaactgcctg nttctanagg 120
tttctatccc acgaaatccc cttgaattgg gaaacnattg ggcanccgaa aaa
<210> 825
<211> 341
<212> DNA
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<223> n equals a,t,g, or c
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<222> (335)
<223> n equals a,t,g, or c
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<222> (339)
<223> n equals a,t,g, or c
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tataggcgat agaaattgaa acctggcgca atagatatag taccgcaagg ggaaagatga 120
aaaattataa ccaagcataa tatagcaagg actaacccct ataccttctg cataatgaat 180
taactagaaa taactttgca aggagagcca aagctaagac ccccgaaacc agaacgagct 240
accttagaac agcttaaaga gcacacccct ctatttttgc canaatagtg ggaaagattt 300
ataggttgaa ggnaacnaac ctaccgagcc tggtnaatnc t
<210> 826
<211> 492
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (337)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (416)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (446)
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<221> misc feature
<222> (471)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (475)
<223> n equals a,t,g, or c
<220>
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<222> (480)
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ataggcgata gaaattgaaa cctggcgcaa tagatatagt accgcaaggg aaagatgaaa 120
aattataacc aagcataata tagcaaggac taacccctat accttctgca taatgaatta 180
actagaaata actttgcaag gagagccaaa gctaagaccc ccgaaaccag acgagctacc 240
taagaacagc taaaagagca cacccgtcta tgtagcaaaa tagtgggaag atttataggt 300
agaggegaca aacctaccga gcctggtgat agctggntgt ccaagataga atcttagttc 360
aactttaaat ttgcccacag aaccctctaa atccccttgt aaatttaact gttagnccaa 420
agaggaacaa gctctttgga cactangaaa aaaccttgta tagagaggaa naaanatttn 480
acaacccata ct
                                                                   492
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<211> 290
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (230)
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<221> misc feature
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<220>
<221> misc feature
<222> (262)
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<221> misc feature
<222> (264)
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<222> (290)
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aacgggaccg teettetege teegeeeege gggggteeee tegtetetee teteeeegee 120
cgccggcggt gcgtgtggga aggcgtgggg tgcggacccc ggcccgacct cgccgtcccg 180
cccgccgcct tctgcgtcgc gggtgcgggc cggcggggtc ctctgacgcn gcagacagcc 240
ctcgctgtcn cctccagtgg angncgactt gcgggcggta ctcctacgan
<210> 828
<211> 420
<212> DNA
<213> Homo sapiens
<220>
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<222> (334)
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<222> (382)
<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
<220>
<221> misc feature
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agcgtgcacc aagggcttgg tctgcggggg ccttggagct cctgctcttc tcccgcacct 120
ccatggatgc actgctgccg agcagageng cctctgccag gccccgccct gggattccta 180
gagactagct tcagttttgc tattttttt aagtgggaga agggtgggca gttatcactg 240
gggaagagag gaccggccac ctgtccagca tgggctccag agccttcctc tctcacaggg 300
cagagtettg teggeaagge ageeteetgg ceantitete tgeteatgtt tetggttage 360
agagttcaga gccaattgtt tnacttcttg gttgtncccg tgnangaagc ctttcaaaac 420
<210> 829
<211> 298
<212> DNA
<213> Homo sapiens
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<222> (20)
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<222> (129)
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<220>
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<222> (281)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (287)
<223> n equals a,t,g, or c
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ttcagaaaaa acaatagtnn tgtgcctctn tcttctcaaa caatggatga cacaanncta 60
tggagagtga caaaatggtg acaggtagct ggggacctag gctatctcnc catgaaggtt 120
gttcngctna ttgtatatct gtgtatgtag tgtaactata ttgtacaatg ngaagactgt 180
naactactat ntagggttgt tgcagattga aatttagttg tctcattggc tgtctgagga 240
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agtgtggact tctatatata gatctannnt gaaaactgct ncatgantga aaaccaca
                                                                   298
<210> 830
<211> 516
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (10)
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<222> (408)
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<221> misc feature
<222> (475)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (477)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (497)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (513)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (515)
<223> n equals a,t,g, or c
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egggggcate ecettgteec caagagacec gacgettget teatggeeta caegttegag 120
agagagtett egggagagga ggaggagtag ggcegeeteg gggetgggea teeggeeeet 180
ggggccaccc cttgtcagcc gggtgggtag gaaccgtaga ctcgctcatc tcgcctgggt 240
ttgtccgcat gttgtaatcg tgcaaataaa cgctcactcc gaattagcgg tgtatttctt 300
gaagtttaat attgtgtttg tgatactgaa gtatttgctt taattctaaa taaaaattta 360
tattttactt ttttattgct ggtttaagat gattcagatt atccttgnac tttgaggaga 420
agtttcttat ttggagcttt tggaaacagc ttaagctttt aacttggaaa gatangnatt 480
aatccccttc attggtntcc aaaagccaat aangng
<210> 831
<211> 636
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (414)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (453)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (530)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (617)
<223> n equals a,t,g, or c
<400> 831
ggaaaaaaat gagttccatt taaaattttg gcatatggca ttttctaact taggaagcca 60
caatgttctt ggcccatcat gacattgggt agcattaact gtaagttttg tgcttccaaa 120
toactttttg gtttttaaga atttcttgat actcttatag cctgccttca attttgatcc 180
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tttattcttt ctatttgtca ggtgcacaag attaccttcc tgttttagcc ttctgtcttg 240
tcaccaacca ttcttacttg qtqqccatgt acttggaaaa aggccgcatg atctttctgg 300
ctccactcag tgtctaaggc accetgette etttgettge atcccacaga etattteeet 360
catcctattt actgcagcaa atctctcctt agttgatgag actgtgttta tctnccttta 420
aaaccctacc tatcctqaat ggtctgtcat tgnctgcctt taaaatcctt cctctttctt 480
cctcctctat tctctaaata atgatgggc ttaagttata cccaaagctn actttacaaa 540
atatttcctc aagactttgc agaaacacca acaaaatgcc atttaaaaaa ggggattttc 600
tttaaaggaa ctctaanaca ggcaaggttc tgatgt
                                                                   636
<210> 832
<211> 466
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (421)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (443)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (446)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (453)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (466)
<223> n equals a,t,g, or c
<400> 832
gatcagatta tgagttactg tttaaaagaa aaatgctgtt tattcatgct gaggtgattc 60
agttecetec ttettacaga agtattttaa tteaceccae actagaaatg cagcatettt 120
gtggacgtct ttttcacaag cctccaaggc tccttagatt gggtcgttac taaaagtaca 180
ttaaaacact cttgtttatc gaagtatatt gatgtattct aaagctagta aacttcccta 240
acgtttaatt gccctacaga tgcttctctt gctgtgggtt ttcttttgtt agtggtctga 300
aataattatt ttcctgttct attaatacat aagtgtattt tgcacaaaaa aattaacctg 360
gtcaaatagt gattaccaaa atatatatta ataatcttgg gcaaattttt gccatttata 420
ngaaaacatt tttaacccac ggntangttc tanatttatt ctttcn
<210> 833
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<211> 405

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 <221> misc feature
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 <223> n equals a,t,g, or c
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 ttttaattca acccagccat gcaatgccaa ataatagaat tgctccctac cagctgaaca 60
 gggaggagtc tgtgcagttt ctgacacttg ttgttgaaca tggctaaata caatgggtat 120
 cgctgagact aagttgtaaa aaattaacaa atgtgctgct tggttaaaat ggctacactc 180
 atotgactca ttotttatto tattttagtt ggtttgtato ttgcctaagg tgcgtantco 240
 aactottggt attaccotco taatagtoat actagtanto atactocctg gtgttatgta 300
 ttctctaaaa gctttaaatg tctgcattgc aaccngccat caaatattga atgggctctc 360
 ttttggctgg aattacaaac tcaaaaaatg tttctcagga aaaaa
                                                                    405
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<211> 402
 <212> DNA
 <213> Homo sapiens
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 <222> (332)
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<222> (390)
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ggagcagaac ccaacctccg agcagtacat gctaagactt caccagtcaa agcgaactac 120
tatactcaat tgatccaata acttgaccaa cggaacaagt taccctaggg ataacagcgc 180
aatcctattc tagagtccat atcaacaata gggtttacga cctcgatgtt ggatcaggac 240
atcccgatgg tgcagccgct attaaaggtt cgtttgntca acgattaaag tcctacgtga 300
tetgagttca gaceggagta atecaggteg gnttetatet aetteaaatt eetneetgna 360
cgaaaggaca agagaaataa gggctacttn acaaagcgcn tt
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<222> (4)
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<222> (100)
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<220>
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<221> misc feature
<222> (110)
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<221> misc feature
<222> (117)
<223> n equals a,t,g, or c
<400> 835
aaaaagggcg gccgttntaa aggatccaag cttacgtacn cgtgcatgcn acgtcanagc 120
<210> 836
<211> 411
<212> DNA
<213> Homo sapiens
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<222> (344)
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agtaagcctg ccagacacgc tgtggcggct gcctgaagct agtgagtcgc ggcgccgcgc 60
acttgtggtt gggtcagtgc cgcgcgccgc tcggtcgtta ccgcgaggcg ctggttggcct 120
traggetgga cggcgcggt cagecetggt ttgccggett etgggtettt gaacageege 180
gatgtcgatc ttcaccccca ccaaccagat ccgcctaacc aatgtggccg tggtacggat 240
gaagegegee aggaageget tegaaatege ttgetacaga aacaagtegt eggetggegg 300
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agggetttgg aaaaagaett gatgaatttt geagaecean caangtttgt aaagttneea 360

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aagtcagttt ccaaaaggaa attcancagg ggtttggaaa atgccaanga a
                                                               411
<210> 837
<211> 386
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (381)
<223> n equals a,t,g, or c
<220>
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<222> (385)
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<220>
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<222> (386)
<223> n equals a,t,g, or c
<400> 837
gcggcagctc agcaagtggt ggaccaggcc acagaggcgg ggcagaaagc catggaccag 60
ctggccaaga ccaccagga aaccatcgac aagactgcta accaggcctc tgacaccttc 120
totgggatcg ggaaaaaatt cggcctcctg aaatgacagc agggagactt gggtcggcct 180
cctgaaatga tagcagggag acttgggtga ccccccttcc aggcgccatc tagcacagcc 240
tggccctgat ctccgggcag ccaccacctc ctcggtctgc cccctcatta aaattcacgt 300
aaaaaaaaa aaaaaaaaa ngnnnn
<210> 838
<211> 124
<212> DNA
<213> Homo sapiens
<400> 838
gctttcaata gatcgcagcg agggagctgc tctgctacgt acgaaacccc gacccagaag 60
caggtcgtct acgaatggtt tagcgccagg ttccccacga acgtgcggtg cgtgacgggc 120
gagg
                                                              124
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<210> 839
<211> 270
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c
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<222> (56)
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<222> (175)
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<222> (250)
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<221> misc feature
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<223> n equals a,t,g, or c
<400> 839
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atctggttgt ggttacaatg aaaatnagaa gcattattga tggattcgca taagcncaat 60
gtgatgtcct gegeegttet geeecetete cettecaggg tgagggnetg gggtgagggt 120
taatgttcgn accagtgctg gctgttcccc tcaccctaac cctctcccca aaggncgnag 180
gggcccggtt acccaattcg ccctatagtg agtcgtatta caattcactg gccgtcgttt 240
tacaagacgn agggaggagn ntgatgaaaa
<210> 840
<211> 430
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (210)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (262)
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<221> misc feature
<222> (263)
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<222> (348)
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<221> misc feature
<222> (369)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (390)
<223> n equals a,t,g, or c
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<222> (395)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (409)
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ctctacatca ccgccccgac cttagctctc accatcgctc ttctactatg aaccccctc 60
cccataccca accccetggt caacctcaac ctaggcctcc tatttattct agccacctct 120
agcctagccg tttactcaat cctctgatca gggtgagcat caaactcaaa ctacgccctg 180
atoggogoac tgcgagcagt agcccaaacn atotcatatg aagtcaccct agccatcatt 240
cctactatca acattactaa tnngttggct cctttaacct ctccaccett atcacaacac 300
aaqaacactc ctgaatatcc tqccatcata accctttggc catatatnat tatcttccac 360
actagggana acaacgaacc cccttcgaan cttgngaaag ggaatttcna ataatcttca 420
ggttcaaatt
<210> 841
<211> 650
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (519)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (555)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (564)
<223> n equals a,t,g, or c
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<222> (573)
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<220>
<221> misc feature
<222> (589)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (634)
<223> n equals a,t,g, or c
<400> 841
geogteatet actetaceat etttgeagge acacteatea cagegetaag etegeaetga 60
ttttttacct gagtaggcct agaaataaac atgctagctt ttattccagt tctaaccaaa 120
aaaataaacc ctcgttccac agaagctgcc atcaagtatt tcctcacgca agcaaccgca 180
tccataatcc ttctaatagc tatcctcttc aacaatatac tctccggaca atgaaccata 240
accaataata ccaatcaata ctcatcatta ataatcataa tggctatagc aataaaacta 300
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ggaatagece cettteactt etgagteeca gaggttacee aaggeaceee tetgacatee 360
 ggcctgcttc ttctcacatg acaaaaacta gcccccatct caatcatata ccaaatctct 420
 ccctcactag acgtaagcct tctcctcact ctctcaatct tatccatcat agtaggcagt 480
 tgagggtgga ttaaaccaaa acccagctac gcaaaatcnt agcatacttc ctcaattacc 540
cacataggat gaatnaatag cagnttctac cgnacaaccc ttacataanc atttcttaaa 600
ttaactaatt atattaatcc taactactac ggantctact actaacttaa
<210> 842
<211> 509
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (438)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (455)
<223> n equals a,t,g, or c
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<222> (462)
<223> n equals a,t,g, or c
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<222> (468)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (482)
<223> n equals a,t,g, or c
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gtctgtctct gctcgaattg acagaaaagg attctgtgaa ggtgatgaga tttccatcca 120
tgctgacttt gagaatacat gttcccgaat tgtggtcccc aaagctgcca ttgtggcccg 180
ccacacttac cttgccaatg gccagaccaa ggtgctgact cagaagttgt catcagtcag 240
aggicaatcat attaticticag ggacatgege atcatggegt ggeaagagee ttegggttea 300
gaagatcagg cottotatco tgggctgcaa catcottoga gttgaatatt cottactgat 360
ctatgttagc gttcctggat ccaagaaggt catccttgac ctgcccctgg taattggcag 420
cagatcaggt ctaagcanca gaacatccag ctggncagcc cnaaccanct ctgaagatga 480
gntgggtaga tctgaacatc ctgataccc
                                                                   509
<210> 843
<211> 158
<212> PRT
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<213> Homo sapiens

<400> 843

Lys Arg Asp Trp Val Ile Pro Pro Ile Ser Cys Pro Glu Asn Glu Lys
1 5 10 15

Gly Pro Phe Pro Lys Asn Leu Val Gln Ile Lys Ser Asn Lys Asp Lys
20 25 30

Glu Gly Lys Val Phe Tyr Ser Ile Thr Gly Gln Gly Ala Asp Thr Pro 35 40 45

Pro Val Gly Val Phe Ile Ile Glu Arg Glu Thr Gly Trp Leu Lys Val 50 55 60

Thr Glu Pro Leu Asp Arg Glu Arg Ile Ala Thr Tyr Thr Leu Phe Ser 65 70 75 80

His Ala Val Ser Ser Asn Gly Asn Ala Val Glu Asp Pro Met Glu Ile 85 90 95

Leu Ile Thr Val Thr Asp Gln Asn Asp Asn Lys Pro Glu Phe Thr Gln 100 105 110

Glu Val Phe Lys Gly Ser Val Met Glu Gly Ala Leu Pro Gly Thr Ser

Val Met Glu Val Thr Ala Thr Asp Ala Asp Asp Gly Cys Gly Thr Pro 130 135 140

Thr Met Pro Pro Ser Leu Thr Pro Ser Ser Ala Gln Asp Pro 145 150 155

<210> 844

<211> 601

<212> PRT

<213> Homo sapiens

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<221> SITE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (383)
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<400> 844
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Pro Trp Pro Arg Gly Gln Gly Trp Gln Gln Trp Gln Gln Gln Trp Arg
Arg Arg Trp Xaa Ser Trp Arg Lys Asp Arg Ala Arg Thr Arg Arg Gln
                             40
Glu Glu Leu Ala Leu Ser Gln Glu Pro Lys Ser Ser Ser Arg Gly Xaa
                         55
Ser Pro Gly Ala Ser Pro Ala Ser Pro Thr Ser Gln Gln Phe Cys Cys
                    70
                                        75
 65
Phe Arg Leu Asp Gln Val Ile His Ser Asn Pro Ala Gly Ile Gln Gln
Ala Leu Ala Gln Leu Ser Xaa Arg Gln Xaa Ser Val Thr Ala Pro Gly
                               105
            100
Gly His Pro Arg His Lys Pro Gly Pro Pro Gln Ala Pro Gln Gly Pro
                           120
Ser Pro Arg Pro Pro Thr Arg Tyr Glu Pro Gln Arg Val Asn Ser Gly
           135
   130
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Leu 145	Ser	Ser	Asp	Pro	Ніs 150	Phe	Xaa	Glu	Pro	Gly 155		Met	Val	Arg	Gly 160
Val	Gly	Gly	Thr	Pro 165	Arg	Asp	Ser	Ala	Gly 170		Ser	Pro	Phe	Pro 175	
Lys	Arg	Arg	Glu 180		Pro	Pro	Arg	Lys 185		Glu	Leu	Leu	Gln 190		Glu
Ser	Leu	Pro 195	Pro	Pro	His	Ser	Ser 200		Phe	Leu	Gly	Ser 205		Pro	Glu
Gly	Pro 210	Gly	Pro	Gln	Ala	Glu 215	Ser	Arg	Asp	Thr	Gly 220		Glu	Ala	Leu
Thr 225	Pro	His	Ile	Trp	Asn 230	Arg	Leu	His	Thr	Ala 235	Thr	Ser	Arg	Lys	Ser 240
Туг	Arg	Pro	Ser	Ser 245	Met	Glu	Pro	Trp	Met 250	Glu	Pro	Leu	Ser	Pro 255	Phe
Glu	Asp	Val	Ala 260	Gly	Thr	Glu	Met	Ser 265	Gln	Ser	Asp	Ser	Gly 270		Asp
Leu	Ser	Gly 275	Asp	Ser	Gln	Val	Ser 280	Ser	Gly	Pro	Cys	Ser 285	Gln	Arg	Ser
Ser	Pro 290	Asp	Gly	Gly	Leu	Lys 295	Gly	Ala	Ala	Glu	Gly 300	Pro	Pro	Lys	Arg
Pro 305	Gly	Gly	Ser	Ser	Pro 310	Leu	Asn	Ala	Val	Pro 315	Сув	Glu	Gly	Pro	Pro 320
Gly	Ser	Glu	Pro	Pro 325	Arg	Arg	Pro	Pro	Pro 330	Ala	Pro	His	Asp	Gly 335	Asp
Arg	Lys	Glu	Leu 340	Pro	Arg	Glu	Gln	Pro 345	Leu	Pro	Pro	Gly	Pro 350	Ile	Gly
		Arg 355					360		_			365			
arg	Pro 370	Ser	His	Arg	Pro	Gly 375	Pro	Pro	Val	Gln	Phe 380	Gly	Thr	Xaa	Asp
Lys 885	Asp	Ser	Asp	Leu	Arg 390	Leu	Val	Val	Gly	Asp 395	Ser	Leu	Lys	Ala	Glu 400
ys	Glu	Leu	Thr	Ala 405	Ser	Val	Thr	Glu	Ala 410	Ile	Pro	Val	Ser	Arg 415	Asp

790

Trp Glu Leu Pro Ser Ala Ala Ser Ala Glu Pro Gln Ser Lys 425 Asn Leu Asp Ser Gly His Cys Val Pro Glu Pro Ser Ser Ser Gly Gln 440 Arg Leu Tyr Pro Glu Val Phe Tyr Gly Ser Ala Gly Pro Ser Ser Ser 455 Gln Ile Ser Gly Gly Ala Met Asp Ser Gln Leu His Pro Asn Ser Gly 470 475 Gly Phe Arg Pro Gly Thr Pro Ser Leu His Pro Tyr Arg Ser Gln Pro Leu Tyr Leu Pro Pro Gly Pro Ala Pro Pro Ser Ala Leu Leu Ser Gly 505 Val Ala Leu Lys Gly Gln Phe Leu Asp Phe Ser Thr Met Gln Ala Thr 520 Glu Leu Gly Lys Leu Pro Ala Gly Gly Val Leu Tyr Pro Pro Pro Ser Phe Leu Tyr Ser Pro Ala Phe Cys Pro Ser Pro Leu Pro Asp Thr Ser Leu Leu Gln Val Arg Gln Asp Leu Pro Ser Pro Ser Asp Phe Tyr Ser 570 Thr Pro Leu Gln Pro Gly Gly Gln Ser Gly Phe Leu Pro Ser Gly Ala 580 585 Pro Ala Ser Arg Cys Phe Tyr Pro Trp 595

<210> 845

<211> 67

<212> PRT

<213> Homo sapiens

<400> 845

Thr Gln Lys Thr Ser Ser Leu Leu Pro Ala Leu Ser Leu Gln Leu Pro 1 5 10 15

Leu Leu Thr Arg Phe Ser Ile Met Cys Ser Val Lys Glu Glu Phe Trp

791

Arg Val Gln Ser Ile Ile Thr Glu Leu Val Leu Lys Gly Glu Phe Gly 35 40 45

Val Glu Glu Ala Met Lys Leu Ile Thr Gly Thr Glu Ala Lys Tyr Lys 50 55 60

Ser Ile Asp 65

<210> 846

<211> 146

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 846

Ser Gln Gly Pro Asp His Pro Ser Ser Gln Leu Gln Pro Leu Asn Xaa 1 5 10 15

Ser Leu Ser His Leu Leu Val Pro Cys Leu Ser Ile Met Ser Leu Leu
20 25 30

Asn Lys Pro Lys Ser Glu Met Thr Pro Glu Glu Leu Gln Lys Arg Glu 35 40 45

Glu Glu Glu Phe Asn Thr Gly Pro Leu Ser Val Leu Thr Gln Ser Val 50 60

Lys Asn Asn Thr Gln Val Leu Ile Asn Cys Arg Asn Asn Lys Lys Leu 65 70 75 80

Leu Gly Arg Val Lys Ala Phe Asp Arg His Cys Asn Met Val Leu Glu 85 90 95

Asn Val Lys Glu Met Trp Thr Glu Val Pro Lys Ser Gly Lys Gly Lys 100 105 110

Lys Lys Ser Lys Pro Val Asn Lys Asp Arg Tyr Ile Ser Lys Met Phe 115 120 125

Leu Arg Gly Asp Ser Val Ile Val Val Leu Arg Asn Pro Leu Ile Ala 130 135 140

Gly Lys

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<21	0> 8	47													
	1> 1														
	2> P														
		omo	sani	eng											
-21	J- 11	Omo	oupı	C11.5											
<221	0>														
	1> s	ITE													
	2> (
	,		gual	s an	v of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
			•		•				•		,				
<220)>														
<22	1> S	ITE													
<222	2> (179)													
<223	3> x	aa e	qual	s an	y of	the	nat	ural	ly o	ccur.	ring	L-a	mino	aci	ds
<400)> 8	47													
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1				5					10					15	
Ala	Ala	Met	Ala	Gln	Trp	Arg	Lys	Lys	Lys	Gly	Leu	Arg		Arg	Arg
			20					25					30		
Gly	Ala		Ser	Gln	Ala	Arg		Ser	Asn	Ser	Glu		Gly	Glu	Phe
		35					40					45			
_		_	_	_				_		_	_	_		_	
Glu		Gln	Ala	Glu	Asp		Ala	Arg	Ala	Arg		Leu	GIĀ	Pro	Gly
	50					55					60				
				mb			mh	c	G1	C	mb w	C	7 a.m.	77-1	~1··
	Pro	ьeu	Pro	Thr		PIO	THE	ser	GIU	75	THE	ser	ASD	vai	80
65					70					75					60
D=-0	200	mb∽	7	Glu	Mot	1753	7 ~~	712	Gln.	Aen	Tare	Tare	T.ve	Tare	T.170
	Map	1111	игâ	85	Me L	Val	ura	ALU	90	NSI.	<i></i> 3	Lly J	-y -	95	Lly J
				0.5					70					23	
Ser	Glv	ឲាម	Phe	Gln	Ser	Met	Glv	Leu	Ser	Tvr	Pro	Val	Phe	Lvs	Gly
	,	O_1	100				,	105		-1-			110	-1-	1
Ile	Met	Lvs	Lvs	Gly	Tvr	Lys	Val	Pro	Thr	Pro	Ile	Gln	Arg	Lys	Thr
		115			•	•	120					125	-	-	
Cle	Pro	Val	Ile	Leu	Asp	Gly	Lys	Asp	Val	Val	Ala	Met	Ala	Arg	Thr
	130				-	135	-	-			140			-	
Sly	Ser	Gly	Lys	Thr	Ala	Cys	Phe	Leu	Leu	Pro	Met	Phe	Glu	Arg	Leu
145		-	-		150	-				155					160
уs	Thr	His	Ser	Ala	Gln	Thr	Gly	Ala	Arg	Ala	Ser	Ser	Ser	Arg	Arg
				165					170					175	

Pro Glu Xaa Trp Pro Cys Arg Pro 180

<210> 848

<211> 160

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (35)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 848

Ala Arg Ala Ser Ser Glu Cys Ala Arg Cys Ala Ala Ala Val Arg Thr 1 5 10 15

Cys Arg Arg His Arg His His Ala Gln Leu Arg Arg His Leu Glu 20 25 30

Asp Ala Xaa Ser Glu Asn Phe Asp Glu Leu Leu Lys Ala Leu Gly Val

Asn Ala Met Leu Arg Lys Val Ala Val Ala Ala Ala Ser Lys Pro His

Val Glu Ile Arg Gln Asp Gly Asp Gln Phe Tyr Ile Lys Thr Ser Thr
65 70 75 80

Thr Val Arg Thr Thr Glu Ile Asn Phe Lys Val Gly Glu Gly Phe Glu

Glu Glu Thr Val Asp Gly Arg Lys Cys Arg Ser Leu Ala Thr Trp Glu 100 105 110

Asn Glu Asn Lys Ile His Cys Thr Gln Thr Leu Leu Glu Gly Asp Gly

Pro Lys Thr Tyr Trp Thr Arg Glu Leu Ala Asn Asp Glu Leu Ile Leu 130 135 140

Thr Phe Gly Ala Asp Asp Val Val Cys Thr Arg Ile Tyr Val Arg Glu 145 150 155 160

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<210> 849
<211> 75
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 849
Val Gln Asn Val Gly Tyr Gln Ser Lys His Cys Gly Ala Val Xaa Tyr
Ala Arg Leu Pro Cys Glu Met Ile Gln Asp Gln Asn Lys Ala Leu Asp
             20
                                25
Cys Ser Lys Thr Gln Asn Ser Ser Arg Ala Glu Gly Gly Arg Leu Ile
Trp Xaa Glu Gly Pro Lys Tyr Lys Thr Asp Gly Leu Arg Leu Glu Thr
Arg Gly Leu Arg Trp Lys Ala His Val Pro Arg
             70
<210> 850
<211> 383
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (299)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 850
Ser Thr His Ala Ser Ala His Ala Ser Val Ala Asn Glu Val Ile Lys
                 5
Cys Lys Ala Ala Val Ala Trp Glu Ala Gly Lys Pro Leu Ser Ile Glu
                                25
            20
```

GIU	116	35		міа	PIO	Pro	ьуs 40		птэ	Giu	Val	45		гуэ	110
Ile	Ala 50		Ala	Val	Cys	His 55	Thr	Asp	Ala	Tyr	Thr 60		Ser	Gly	Ala
Asp 65		Glu	Gly	Суз	Phe 70	Pro	Val	Ile	Leu	Gly 75		Glu	Gly	Ala	G1;
Ile	Val	Glu	Ser	Val 85	Gly	Glu	Gly	Val	Thr 90	_	Leu	Lys	Ala	Gly 95	Asj
Thr	Val	Ile	Pro 100	Leu	Tyr	Ile	Pro	Gln 105		Gly	Glu	Cys	Lys 110		Cys
Leu	Asn	Pro 115	Lys	Thr	Asn	Leu	Cys 120	Gln	Lys	Ile	Arg	Val 125	Thr	Gln	Gly
Lys	Gly 130		Met	Pro	Asp	Gly 135	Thr	Ser	Arg	Phe	Thr 140	Cys	Lys	Gly	Lys
Thr 145	Ile	Leu	His	Tyr	Met 150	Gly	Thr	Ser	Thr	Phe 155	Ser	Glu	Tyr	Thr	Va:
Val	Ala	Asp	Ile	Ser 165	Val	Ala	Lys	Ile	Asp 170	Pro	Leu	Ala	Pro	Leu 175	Asp
Lys	Val	Cys	Leu 180	Leu	Gly	Cys	Gly	Ile 185	Ser	Thr	Gly	Tyr	Gly 190	Ala	Ala
Val	Asn	Thr 195	Ala	Lys	Leu	Glu	Pro 200	Gly	Ser	Val	Cys	Ala 205	Val	Phe	Gl
Leu	Gly 210	Gly	Val	Gly	Leu	Ala 215	Val	Ile	Met	Gly	Cys 220	Lys	Val	Ala	Gl
Ala 225	Ser	Arg	Ile	Ile	Gly 230	Val	Asp	Ile	Asn	Lys 235	Asp	Lys	Phe	Ala	Arc 240
Ala	Lys	Glu	Phe	G1y 245	Ala	Thr	Glu	Cys	Ile 250	Asn	Pro	Gln	Asp	Phe 255	Ser
Lys	Pro	Ile	Gln 260	Glu	Val	Leu	Ile	Glu 265	Met	Thr	Asp	Gly	Gly 270	Val	Asţ
Tyr	Ser	Phe 275	Glu	Суз	Ile	Gly	Asn 280	Val	Lys	Val	Met	Arg 285	Ala	Ala	Leu
	Ala	_	His	Lys	-	Trp	Gly	Val	Thr		Val		Gly	Val	Ala

796

Ala Ser Gly Glu Glu Ile Ala Thr Arg Pro Phe Gln Leu Val Thr Gly 305 310 315 320

Arg Thr Trp Lys Gly Thr Ala Phe Gly Gly Trp Lys Ser Val Glu Ser 325 330 335

Val Pro Lys Leu Val Ser Glu Tyr Met Ser Lys Lys Ile Lys Val Asp 340 345 350

Glu Phe Val Thr His Asn Leu Ser Phe Asp Glu Ile Asn Lys Ala Phe 355 360 365

Glu Leu Met His Ser Gly Lys Ser Ile Arg Thr Val Val Lys Ile 370 375 380

<210> 851

<211> 154

<212> PRT

<213> Homo sapiens

<400> 851

Ala Arg Ala Pro Arg Ala Thr Leu Asn Gly Pro Gly Ala Arg Gly Arg
1 5 10 15

Val Gly Val Val Leu Arg Pro Arg Pro Arg Gly Leu Arg Phe Pro

Trp Cys Pro Gly Arg Pro Ala Ser Gly Ala Val Ser Tyr Glu Ser Ala 35 40 45

His Ala Ala Ser Val Arg Leu Thr Leu Arg Thr Met Glu Gly Gly Phe
50 55 60

Gly Ser Asp Phe Gly Gly Ser Gly Ser Gly Lys Leu Asp Pro Gly Leu 65 70 75 80

Ile Met Glu Gln Val Lys Val Gln Ile Ala Val Ala Asn Ala Gln Glu 85 90 95

Leu Leu Gln Arg Met Thr Asp Lys Cys Phe Arg Lys Cys Ile Gly Lys
100 105 110

Pro Gly Gly Ser Leu Asp Asn Ser Glu Gln Lys Cys Ile Ala Met Cys 115 120 125

Met Asp Arg Tyr Met Asp Ala Trp Asn Thr Val Ser Arg Ala Tyr Asn 130 135 140

Ser Arg Leu Gln Arg Glu Arg Ala Asn Met

797

145 150

<210> 852

<211> 396

<212> PRT

<213> Homo sapiens

<400> 852

Asp Ser Arg Val Asp Pro Arg Val Arg Ala Ile Ile Ala Lys Thr Phe I 5 10 15

Lys Gly Arg Gly Ile Thr Gly Val Glu Asp Lys Glu Ser Trp His Gly
20 25 30

Lys Pro Leu Pro Lys Asn Met Ala Glu Gln Ile Ile Gln Glu Ile Tyr $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ser Gln Ile Gln Ser Lys Lys Lys Ile Leu Ala Thr Pro Pro Gln Glu 50 55 60

Asp Ala Pro Ser Val Asp Ile Ala Asn Ile Arg Met Pro Ser Leu Pro 65 70 75 80

Ser Tyr Lys Val Gly Asp Lys Ile Ala Thr Arg Lys Ala Tyr Gly Gln \$95\$

Ala Leu Ala Lys Leu Gly His Ala Ser Asp Arg Ile Ile Ala Leu Asp 100 105 110

Gly Asp Thr Lys Asn Ser Thr Phe Ser Glu Ile Phe Lys Lys Glu His
115 120 125

Pro Asp Arg Phe Ile Glu Cys Tyr Ile Ala Glu Gln Asn Met Val Ser 130 135 140

Ile Ala Val Gly Cys Ala Thr Arg Asn Arg Thr Val Pro Phe Cys Ser 145 150 155 160

Thr Phe Ala Ala Phe Phe Thr Arg Ala Phe Asp Gln Ile Arg Met Ala 165 170 175

Ala Ile Ser Glu Ser Asn Ile Asn Leu Cys Gly Ser His Cys Gly Val 180 185 190

Ser Ile Gly Glu Asp Gly Pro Ser Gln Met Ala Leu Glu Asp Leu Ala 195 200 205

Met Phe Arg Ser Val Pro Thr Ser Thr Val Phe Tyr Pro Ser Asp Gly 210 215 220

798

Val Ala Thr Glu Lys Ala Val Glu Leu Ala Ala Asn Thr Lys Gly Ile 225 230 235 240

Cys Phe Ile Arg Thr Ser Arg Pro Glu Asn Ala Ile Ile Tyr Asn Asn 245 250 255

As nGlu Asp Phe Gln Val Gly Gln Ala Lys Val Val Leu Lys Ser Lys 260 265 270

Asp Asp Gln Val Thr Val Ile Gly Ala Gly Val Thr Leu His Glu Ala 275 280 285

Leu Ala Ala Ala Glu Leu Leu Lys Lys Glu Lys Ile Asn Ile Arg Val 290 295 300

Leu Asp Pro Phe Thr Ile Lys Pro Leu Asp Arg Lys Leu Ile Leu Asp 305 310 315 320

Ser Ala Arg Ala Thr Lys Gly Arg Ile Leu Thr Val Glu Asp His Tyr 325 330 335

Tyr Glu Gly Gly Ile Gly Glu Ala Val Ser Ser Ala Val Val Gly Glu 340 345 350

Pro Gly Ile Thr Val Thr His Leu Ala Val Asn Arg Val Pro Arg Ser 355 360 365

Gly Lys Pro Ala Glu Leu Leu Lys Met Phe Gly Ile Asp Arg Asp Ala 370 375 380

Ile Ala Gln Ala Val Arg Gly Leu Ile Thr Lys Ala

<210> 853

<211> 302

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (228)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 853

Ser Arg Leu Gly Leu Gln Ser Cys Gly Leu Ser Thr Gln Ala Ile Thr
1 5 10 15

Leu Ser Glu Thr Ala Ala Ala Leu Asp Cys Ser Leu Pro Arg Leu His

			20					25					30		
Ala	Arg	Gln 35		Met	Arg	Val	Thr 40	Leu	Ala	Thr	Ile	Ala 45	Trp	Met	Val
Ser	Phe 50	Val	Ser	Asn	Tyr	ser 55		Thr	Ala	Asn	Ile 60	Leu	Pro	Asp	Ile
Glu 65	Asn	Glu	Asp	Phe	Ile 70	Lys	Asp	Cys	Val	Arg 75	Ile	His	Asn	Lys	Phe 80
Arg	Ser	Glu	Val	Lys 85	Pro	Thr	Ala	Ser	Asp 90	Met	Leu	Tyr	Met	Thr 95	Trp
Asp	Pro	Ala	Leu 100	Ala	Gln	Ile	Ala	Lys 105	Ala	Trp	Ala	Ser	Asn 110	Cys	Gln
Phe	Ser	His 115	Asn	Thr	Arg	Leu	Lys 120	Pro	Pro	His	Lys	Leu 125	His	Pro	Asn
Phe	Thr 130	Ser	Leu	Gly	Glu	Asn 135	Ile	Trp	Thr	Gly	Ser 140	Val	Pro	Ile	Phe
Ser 145	Val	Ser	Ser	Ala	11e 150	Thr	Asn	Trp	Tyr	Asp 155	Glu	Ile	Gln	Asp	Туг 160
Asp	Phe	Lys	Thr	Arg 165	Ile	Сув	Lys	Lys	Val 170	Суз	Gly	His	Туг	Thr 175	Gln
Val	Val	Trp	Ala 180	Asp	Ser	Tyr	Lys	Val 185	Gly	Cys	Ala	Val	Gln 190	Phe	Cys
Pro	Lys	Val 195	Ser	Gly	Phe	Asp	Ala 200	Leu	Ser	Asn	Gly	Ala 205	His	Phe	Ile
Cys	Asn 210	Tyr	Gly	Pro	Gly	Gly 215	Asn	Tyr	Pro	Thr	Trp 220	Pro	Tyr	Lys	Arg
Gly 225	Ala	Thr	Xaa	Ser	Ala 230	Cys	Pro	Asn	Asn	Asp 235	Lys	Cys	Leu	Asp	Asn 240
Leu	Суз	Val	Asn	Arg 245	Gln	Arg	Asp	Gln	Val 250	ГÀа	Arg	Tyr	Tyr	Ser 255	Val
Val	Tyr	Pro	Gly 260	Trp	Pro	Ile	Tyr	Pro 265	Arg	Asn	Arg	Tyr	Thr 270	Ser	Leu
Phe	Leu	11e 275	Val	Asn	Ser	Val	Ile 280	Leu	Ile	Leu	Ser	Val 285	Ile	Ile	Thr
Ile	Leu	Val	Gln	His	Lys	Tyr	Pro	Asn	Leu	Val	Leu	Leu	Asp		

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800

300

295

290

<210> 854 <211> 237 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (235) <223> Xaa equals any of the naturally occurring L-amino acids <400> 854 Val Pro Ala Ser Phe Ala Ala Ala Ser Ala Val Leu Ser Ala Val Phe Pro Gln Glu Pro Ala Tyr Phe Leu Asn Met Glu Ser Val Val Arg Arg Cys Pro Phe Leu Ser Arg Val Pro Gln Ala Phe Leu Gln Lys Ala Gly Lys Ser Leu Leu Phe Tyr Ala Gln Asn Cys Pro Lys Met Met Glu Val Gly Ala Lys Pro Ala Pro Arg Ala Leu Ser Thr Ala Ala Val His Tyr 75 Gln Gln Ile Lys Glu Thr Pro Pro Ala Ser Glu Lys Asp Lys Thr Ala Lys Ala Lys Val Gln Gln Thr Pro Asp Gly Ser Gln Gln Ser Pro Asp 105 Gly Thr Gln Leu Pro Ser Gly His Pro Leu Pro Ala Thr Ser Gln Gly Thr Ala Ser Lys Cys Pro Phe Leu Ala Ala Gln Met Asn Gln Arg Gly Ser Ser Val Phe Cys Lys Ala Ser Leu Glu Leu Gln Glu Asp Val Gln Glu Met Asn Ala Val Arg Lys Glu Val Ala Glu Thr Ser Ala Gly Pro 170 165 Ser Val Val Ser Val Lys Thr Asp Gly Gly Asp Pro Ser Gly Leu Leu

185

PCT/US00/05882 WO 00/55350

801

Lys Asn Phe Gln Asp Ile Met Gln Lys Gln Arg Pro Glu Arg Val Ser 200

His Leu Leu Gln Asp Asn Leu Pro Lys Ser Val Ser Thr Phe Gln Tyr 215 220

Asp Arg Phe Phe Glu Lys Lys Ile Asp Glu Xaa Lys Glu 230

<210> 855

<211> 272

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (202)

<223> Xaa equals any of the naturally occurring L-amino acids

Thr Pro Gly Ile Phe Thr Glu Gln Ser Met Ile Thr Phe Leu Pro Leu

Leu Leu Gly Leu Ser Leu Gly Cys Thr Gly Ala Gly Gly Phe Val Ala

His Val Glu Ser Thr Cys Leu Leu Asp Asp Ala Gly Thr Pro Lys Asp

Phe Thr Tyr Cys Ile Ser Phe Asn Lys Asp Leu Leu Thr Cys Trp Asp

Pro Glu Glu Asn Lys Met Ala Pro Cys Glu Phe Gly Val Leu Asn Ser

Leu Ala Asn Val Leu Ser Gln His Leu Asn Gln Lys Asp Thr Leu Met 90

Gln Arg Leu Arg Asn Gly Leu Gln Asn Cys Ala Thr His Thr Gln Pro 105

Phe Trp Gly Ser Leu Thr Asn Arg Thr Arg Pro Pro Ser Val Gln Val 120 115

Ala Lys Thr Thr Pro Phe Asn Thr Arg Glu Pro Val Met Leu Ala Cys 135

Tyr Val Trp Gly Phe Tyr Pro Ala Glu Val Thr Ile Thr Trp Arg Lys 150 160

Asn Gly Lys Leu Val Met Pro His Ser Ser Ala His Lys Thr Ala Gln
165 170 175

Pro Asn Gly Asp Trp Thr Tyr Gln Thr Leu Ser His Leu Ala Leu Thr 180 185 190

Pro Ser Tyr Gly Asp Thr Tyr Thr Cys Xaa Val Glu His Ile Gly Ala 195 200 205

Pro Glu Pro Ile Leu Arg Asp Trp Thr Pro Gly Leu Ser Pro Met Gln 210 215 220

Thr Leu Lys Val Ser Val Ser Ala Val Thr Leu Gly Leu Gly Leu Ile 225 230 235 240

Ile Phe Ser Leu Gly Val Ile Ser Trp Arg Arg Ala Gly His Ser Ser 245 250 255

Tyr Thr Pro Leu Pro Gly Ser Asn Tyr Ser Glu Gly Trp His Ile Ser 260 265 270

<210> 856

<211> 153

<212> PRT

<213> Homo sapiens

<400> 856

Val Val Ala Arg Phe Ile Arg Ile Tyr Pro Leu Thr Trp Asn Gly Ser 1 5 10 15

Leu Cys Met Arg Leu Glu Val Leu Gly Cys Ser Val Ala Pro Val Tyr
20 25 30

Ser Tyr Tyr Ala Gln Asn Glu Val Val Ala Thr Asp Asp Leu Asp Phe 35 40 45

Arg His His Ser Tyr Lys Asp Met Arg Gln Leu Met Lys Val Val Asn 50 55 60

Glu Glu Cys Pro Thr Ile Thr Arg Thr Tyr Ser Leu Gly Lys Ser Ser 65 70 75 80

Arg Gly Leu Lys Ile Tyr Ala Met Glu Ile Ser Asp Asn Pro Gly Glu 85 90 95

His Glu Leu Gly Glu Pro Glu Phe Arg Tyr Thr Ala Gly Ile His Gly 100 105 110

Asn Glu Val Leu Gly Arg Glu Leu Leu Leu Leu Leu Met Gln Tyr Leu 115 120 125

Cys Arg Glu Tyr Arg Asp Gly Asn Pro Arg Val Arg Ser Trp Cys Arg 130 135 140

Thr His Ala Ser Thr Trp Cys Pro His 145 150

<210> 857

<211> 258

<212> PRT

<213> Homo sapiens

<400> 857

Cys Leu Ser Gln Lys Ala Val Arg Ala Pro Arg Phe Leu Arg Gly Leu 1 5 10 15

Pro Ser Gly Arg Val Asn Cys Phe Leu Gln Ala Gly His Gly Ala Ser 20 25 30

Arg Ser Gln Gly Ser Gly Leu Cys Gln Met Leu Lys Glu Gly Ala Lys 35 40 45

His Phe Ser Gly Leu Glu Glu Ala Val Tyr Arg Asn Ile Gln Ala Cys 50 55 60

Lys Glu Leu Ala Gln Thr Thr Arg Thr Ala Tyr Gly Pro Asn Gly Met 65 70 75 80

Asn Lys Met Val Ile Asn His Leu Glu Lys Leu Phe Val Thr Asn Asp 85 90 95

Ala Ala Thr Ile Leu Arg Glu Leu Glu Val Gln His Pro Ala Ala Lys
100 105 110

Met Ile Val Met Ala Ser His Met Gln Glu Gln Glu Val Gly Asp Gly
115 120 125

Thr Asn Phe Val Leu Val Phe Ala Gly Ala Leu Leu Glu Leu Ala Glu 130 135 140

Glu Leu Leu Arg Ile Gly Leu Ser Val Ser Glu Val Ile Glu Gly Tyr 145 150 155 160

Glu Ile Ala Cys Arg Lys Ala His Glu Ile Leu Pro Asn Leu Val Cys

804

165 170 175 Cys Ser Ala Lys Asn Leu Arg Asp Ile Asp Glu Val Ser Ser Leu Leu 185 Arg Thr Ser Ile Met Ser Lys Gln Tyr Gly Asn Glu Val Phe Leu Ala 200 Lys Leu Ile Ala Gln Ala Cys Val Ser Ile Phe Pro Asp Ser Gly His 215 Phe Asn Val Asp Asn Ile Arg Val Cys Lys Ile Leu Gly Ser Gly Ile 235 230 Ser Ser Ser Val Leu His Gly Met Val Phe Lys Lys Glu Thr Glu Val Met <210> 858 <211> 143 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (14) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (135) <223> Xaa equals any of the naturally occurring L-amino acids Pro Asp Ser Leu Pro Pro Pro Ser Pro Arg Leu Pro Ala Xaa Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Glu Arg Ser Pro Ser Leu Gly 25 Ile Pro Lys Cys Phe His Ser Val Ile Arg Thr Glu His Arg Gly Leu Thr Met Glu Phe Gly Leu Ser Trp Ile Phe Leu Ala Ala Ile Leu Lys

Gly Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val

805

70 75 80 65 Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr 90 85 Phe Ser Asn Ala Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly 105 Leu Glu Trp Val Gly Arg Ile Lys Ser Lys Thr Asp Gly Gly Thr Thr Asp Tyr Ala Ala Pro Val Xaa Arg Gln Ile His His Leu Lys Arg <210> 859 <211> 135 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (132) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (133) <223> Xaa equals any of the naturally occurring L-amino acids Val Thr Met Ala Gln Gln Ala Ala Asp Lys Tyr Leu Tyr Val Asp Lys Asn Phe Ile Asn Asn Pro Leu Ala Gln Ala Asp Trp Ala Ala Lys Lys 25 Leu Val Trp Val Pro Ser Asp Lys Ser Gly Phe Glu Pro Ala Ser Leu Lys Glu Glu Val Gly Glu Glu Ala Ile Val Glu Leu Val Glu Asn Gly Lys Lys Val Lys Val Asn Lys Asp Asp Ile Gln Lys Met Asn Pro Pro Lys Phe Ser Lys Val Glu Asp Met Ala Glu Leu Thr Cys Leu Asn Glu 85 90

Ala Ser Val Leu His Asn Leu Lys Glu Arg Tyr Tyr Ser Gly Leu Ile

806

100 105 110 Tyr Val Ser Gly Cys Arg Gly Thr Pro Gln Ala Gly Ser Glu Gly Ser 120 Glu Val Gly Xaa Xaa Ala Gly 130 <210> 860 <211> 52 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <400> 860 Ala Xaa Leu Ile Lys Thr Arg Val Leu Ile Tyr Asn Lys Ser Asn Phe Ser Leu Ser Leu Gly Thr Ser Asn Cys Thr Pro Gln Ile Thr Asp Thr Ser Glu Phe Phe Met Val Lys Lys Ala Pro Thr Leu Thr Tyr Lys Cys 40 Gly Pro Arg Asn 50 <210> 861 <211> 321 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (18) . <223> Xaa equals any of the naturally occurring L-amino acids Ala His Gly Val Thr Ser Ala Pro Asp Asn Arg Pro Ala Leu Gly Ser

Thr Xaa Pro Pro Val His Asn Val Thr Ser Ala Ser Gly Ser Ala Ser

25

30

Gly	y Sei	Ala 35		Thr	Leu	Va]	. His		Gly	Thr	Ser	Ala 45		, Ala	Thr
Thi	Th:		Ala	s Ser	Lys	Ser 55		Pro	Phe	s Ser	Ile 60		Ser	His	His
Ser 65		The	Pro	Thr	Thr 70		Ala	Ser	His	Ser 75		Lys	Thr	Asp	Ala 80
Ser	Ser	Thr	: His	His 85		Thr	Val	Pro	Pro 90		Thr	Ser	Ser	Asn 95	His
Ser	Thr	Ser	Pro 100		Leu	Ser	Thr	Gly 105		Ser	Phe	Phe	Phe 110		Ser
Phe	His	115		Asn	Leu	Gln	Phe 120		Ser	Ser	Leu	Glu 125	Asp	Pro	Ser
Thr	Asp 130		Туг	Gln	Glu	Leu 135	Gln	Arg	Asp	Ile	Ser 140	Glu	Met	Phe	Leu
Gln 145		Tyr	Lys	Gln	Gly 150	Gly	Phe	Leu	Gly	Leu 155	Ser	Asn	Ile	Lys	Phe 160
Arg	Pro	Gly	Ser	Val 165	Val	Val	Gln	Leu	Thr 170	Leu	Ala	Phe	Arg	Glu 175	Gly
Thr	Ile	Asn	Val 180	His	Asp	Val	Glu	Thr 185	Gln	Phe	Asn	Gln	Туг 190	ГÀЗ	Thr
		195					Leu 200					205			
Asp	Val 210	Pro	Phe	Pro	Phe	Ser 215	Ala	Gln	Ser	Gly	Ala 220	Gly	Val	Pro	Gly
225					230		Leu			235					240
				245			Ala		250			_	_	255	
			260				Pro	265				_	270		
Ser	Glu	Туг 275	Pro	Thr	Tyr	His	Thr 280	His	Gly	Arg	Tyr	Val 285	Pro	Pro	ser
Ser	Thr 290	Asp	Arg	Ser		Tyr 295	Glu	Lys	Va1	Ser	Ala 300	Gly	Asn	Gly	Gly

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808

Ser Ser Leu Ser Tyr Thr Asn Pro Ala Val Ala Ala Thr Ser Ala Asn 305 310 315 320

Leu

<210> 862

<211> 327

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (307)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 862

Phe Gly Thr Ser Leu Thr Gln Val Leu Leu Gly Ala Gly Glu Asn Thr

Lys Thr Asn Leu Glu Ser Ile Leu Ser Tyr Pro Lys Asp Phe Thr Cys 20 25 30

Val His Gln Ala Leu Lys Gly Phe Thr Thr Lys Gly Val Thr Ser Val 35 40 45

Ser Gln Ile Phe His Ser Pro Asp Leu Ala Ile Arg Asp Thr Phe Val 50 55 60

Asn Ala Ser Arg Thr Leu Tyr Ser Ser Ser Pro Arg Val Leu Ser Asn 65 70 75 80

Asn Ser Asp Ala Asn Leu Glu Leu Ile Asn Thr Trp Val Ala Lys Asn 85 90 95

Thr Asn Asn Lys Ile Ser Arg Leu Leu Asp Ser Leu Pro Ser Asp Thr

Arg Leu Val Leu Leu Asn Ala Ile Tyr Leu Ser Ala Lys Trp Lys Thr 115 120 125

Thr Phe Asp Pro Lys Lys Thr Arg Met Glu Pro Phe His Phe Lys Asn

Ser Val Ile Lys Val Pro Met Met Asn Ser Lys Lys Tyr Pro Val Ala 145 150 155 160

His Phe Ile Asp Gln Thr Leu Lys Ala Lys Val Gly Gln Leu Gln Leu

809

170

175.

165

Ser His Asn Leu Ser Leu Val Ile Leu Val Pro Gln Asn Leu Lys His 185 Arg Leu Glu Asp Met Glu Gln Ala Leu Ser Pro Ser Val Phe Lys Ala 200 Ile Met Glu Lys Leu Glu Met Ser Lys Phe Gln Pro Thr Leu Leu Thr 215 Leu Pro Arg Ile Lys Val Thr Thr Ser Gln Asp Met Leu Ser Ile Met Glu Lys Leu Glu Phe Phe Asp Phe Ser Tyr Asp Leu Asn Leu Cys Gly 250 Leu Thr Glu Asp Pro Asp Leu Gln Val Ser Ala Met Gln His Gln Thr 265 Val Leu Glu Leu Thr Glu Thr Gly Val Glu Ala Ala Ala Ser Ala 280 Ile Ser Val Ala Arg Thr Leu Leu Val Phe Glu Val Gln Gln Pro Phe 295 300 Leu Phe Xaa Leu Trp Asp Gln Gln His Lys Phe Pro Val Phe Met Gly . 310 315 Arg Val Tyr Asp Pro Arg Ala 325 <210> 863 <211> 86 <212> PRT <213> Homo sapiens <400> 863 Tyr Tyr Ile Val His Leu Lys Leu Thr Glu Arg Val Asn Leu Lys Cys Ser His His Thr Asn Pro Lys Val Thr Met Phe Ser Pro His Lys Pro 25

Lys Gly Asn Tyr Val Leu Ile Ser Leu Ile Val Val Thr Ile Ser Gln

Cys Ile His Leu Pro Lys His Tyr Val Val Tyr Leu Glu Tyr Ile Ile

810

Leu Phe Ile Asn Tyr Thr Ser Ile Lys Leu Lys Glu Gly Ile Thr Asn 65 70 75 80

Ser His Lys Ile Gln Ile

85

<210> 864

<211> 130

<212> PRT

<213> Homo sapiens

<400> 864

Leu Thr Gln Gln Gln Gln Pro Ala Thr Gly Pro Gln Pro Ser Leu Gly
1 5 10 15

Val Ser Phe Gly Thr Pro Phe Gly Ser Gly Ile Gly Thr Gly Leu Gln 20 25 30

Ser Ser Gly Leu Gly Ser Ser Asn Leu Gly Gly Phe Gly Thr Ser Ser 35 40 45

Gly Phe Gly Cys Ser Thr Thr Gly Ala Ser Thr Phe Gly Phe Gly Thr 50 60

Thr Asn Lys Pro Ser Gly Ser Leu Ser Ala Gly Phe Gly Ser Ser Ser 65 70 75 80

Thr Ser Gly Phe Asn Phe Ser Asn Pro Gly Ile Thr Ala Ser Ala Gly 85 90 95

Leu Thr Phe Gly Val Ser Asn Pro Ala Ser Ala Gly Phe Gly Thr Gly
100 105 110

Gly Gln Leu Leu Gln Leu Lys Lys Pro Pro Ala Gly Asn Lys Arg Gly
115 120 125

Lys Arg 130

<210> 865

<211> 78

<212> PRT

<213> Homo sapiens

<400> 865

Ser Glu Trp Lys Ile Lys Gly Pro Ser Ser Pro Leu Ala Ser Leu Pro

118

10 Gly Arg Arg His Gly Gly Ser Ser Ala Thr Gly Ala Cys Gly Glu Ala 25 Met Ala Ala Ala Glu Gly Ser Ser Gly Pro Ala Gly Leu Thr Leu Gly 40 Arg Ser Phe Ser Asn Tyr Arg Pro Phe Glu Pro Gln Ala Leu Gly Leu 55 Ser Pro Ser Trp Arg Leu Thr Gly Phe Ser Gly Met Lys Gly 70 <210> 866 <211> 529 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (8) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (517) <223> Xaa equals any of the naturally occurring L-amino acids <400> 866 Pro Pro Pro Glu Pro Arg Ala Xaa Met Ala Glu Asn Pro Ser Leu Glu Asn His Arg Ile Lys Ser Phe Lys Asn Lys Gly Arg Asp Val Glu Thr 20 25 Met Arg Arg His Arg Asn Glu Val Thr Val Glu Leu Arg Lys Asn Lys Arg Asp Glu His Leu Leu Lys Lys Arg Asn Val Pro Gln Glu Glu Ser 50 55 Leu Glu Asp Ser Asp Val Asp Ala Asp Phe Lys Ala Gln Asn Val Thr Leu Glu Ala Ile Leu Gln Asn Ala Thr Ser Asp Asn Pro Val Val Gln 85 90

Leu Ser Ala Val Gln Ala Ala Arg Lys Leu Leu Ser Ser Asp Arg Asn

			100)				105	5				110)	
Pro	Pro	11e	Asp) Asp	Leu	ı Ile	Lys 120		Gl _y	7 Ile	e Leu	125		e Leu	ı Val
Lys	Cys 130		Glu	Arc	, Asp	Asp 135		Pro	Ser	Leu	140		e Glu	a Ala	a Ala
Trp 145		Leu	Thr	Asn	11e		Ser	Gly	Thr	Ser 155		Gln	Thr	Glr	160
Val	Val	Gln	Ser	Asn 165		Val	Pro	Leu	Phe 170		Arg	, Leu	. Leu	175	
Pro	His	Gln	Asn 180		. Cys	Glu	Gln	Ala 185		. Trp	Ala	Leu	190		Ile
Ile	Gly	Asp 195	Gly	Pro	Gln	Cys	Arg 200	_	Tyr	Val	Ile	Ser 205		Gly	Val
Val	Lys 210		Leu	Leu	Ser	Phe 215		Ser	Pro	Ser	1le 220		Ile	Thr	Phe
Leu 225	Arg	Asn	Val	Thr	Trp 230	Val	Ile	Val	Asn	Leu 235		Arg	Asn	Lys	Asp 240
Pro	Pro	Pro	Pro	Met 245	Glu	Thr	Val	Gln	G1u 250		Leu	Pro	Ala	Leu 255	
Val	Leu	Ile	Туг 260	His	Thr	Asp	Ile	Asn 265	Ile	Leu	Val	Asp	Thr 270	Val	Trp
Ala	Leu	Ser 275	Tyr	Leu	Thr	Asp	Gly 280	Gly	Asn	Glu	Gln	Ile 285	Gln	Met	Val
Ile	Asp 290	Ser	Gly	Val	Val	Pro 295	Phe	Leu	Val	Pro	Leu 300	Leu	Ser	His	Gln
Glu 305	Val	Lys	Val	Gln	Thr 310	Ala	Ala	Leu	Arg	Ala 315	Val	Gly	Asn	Ile	Val 320
Thr	Gly	Thr	Asp	Glu 325	Gln	Thr	Gln	Val	Val 330	Leu	Asn	Суз	Asp	Val 335	Leu
Ser	His	Phe	Pro 340	Asn	Leu	Leu	Ser	His 345	Pro	Lys	Glu	Lys	Ile 350	Asn	Lys
Glu	Ala	Val 355	Trp	Phe	Leu	Ser	Asn 360	Ile	Thr	Ala	Gly	Asn 365	Gln	Gln	Gln
7al	Gln	Ala	Val	Ile	Asp	Ala	Glv	Leu	Ile	Pro	Met	Ile	Ile	His	Gln

813

370 375 380 Leu Ala Lys Gly Asp Phe Gly Thr Gln Lys Glu Ala Ala Trp Ala Ile Ser Asn Leu Thr Ile Ser Gly Arg Lys Asp Gln Val Glu Tyr Leu Val 410 Gln Gln Asn Val Ile Pro Pro Phe Cys Asn Leu Leu Ser Val Lys Asp Ser Gln Val Val Gln Val Val Leu Asp Gly Leu Lys Asn Ile Leu Ile 440 Met Ala Gly Asp Glu Ala Ser Thr Ile Ala Glu Ile Ile Glu Glu Cys 455 460 Gly Gly Leu Glu Lys Ile Glu Val Leu Gln Gln His Glu Asn Glu Asp 470 475 Ile Tyr Lys Leu Ala Phe Glu Ile Ile Asp Gln Tyr Phe Ser Gly Asp 485 490 Asp Ile Asp Glu Asp Pro Cys Leu Ile Pro Glu Ala Thr Gln Gly Gly 505 Thr Tyr Asn Phe Xaa Pro Thr Ala Asn Leu Gln Thr Lys Glu Phe Asn Phe

<210> 867 <211> 237 <212> PRT <213> Homo sapiens

Arg Pro Gly Pro Val Arg Arg Gly Lys Val Glu Leu Ile Lys Phe

Val Arg Val Gln Trp Arg Arg Pro Gln Val Glu Trp Arg Arg Arg

Trp Gly Pro Gly Pro Gly Ala Ser Met Ala Gly Ser Glu Glu Leu Gly

Leu Arg Glu Asp Thr Leu Arg Val Leu Ala Ala Phe Leu Arg Arg Gly 50 55

WO 00/55350

814

Glu Ala Ala Gly Ser Pro Val Pro Thr Pro Pro Arg Ser Pro Ala Gln Glu Glu Pro Thr Asp Phe Leu Ser Arg Leu Arg Arg Cys Leu Pro Cys Ser Leu Gly Arg Gly Ala Ala Pro Ser Glu Ser Pro Arg Pro Cys Ser 105 Leu Pro Ile Arg Pro Cys Tyr Gly Leu Glu Pro Gly Pro Ala Thr Pro 120 Asp Phe Tyr Ala Leu Val Ala Gln Arg Leu Glu Gln Leu Val Gln Glu 135 140 Gln Leu Lys Ser Pro Pro Ser Pro Glu Leu Gln Gly Pro Pro Ser Thr 150 155 Glu Lys Glu Ala Ile Leu Arg Arg Leu Val Ala Leu Leu Glu Glu Glu 170 Ala Glu Val Ile Asn Gln Lys Leu Ala Ser Asp Pro Ala Leu Arg Thr 185 Ser Trp Ser Ala Cys Pro Pro Thr Leu Ser Pro Ala Trp Trp Ser Cys 200 Ser Val Ala Gly Met Thr Ala Leu Ala Gln Ala Glu His Ala Pro Gly 215 Pro Arg Leu Leu Pro Arg Ser Pro Trp Pro Ala Trp Pro 230 <210> 868

<210> 868
<211> 196
<212> PRT
<213> Homo sapiens

<220>
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<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (9)

<400> 868

Leu Ser Val Ser Ala Xaa Ala Ala Xaa Val Ala Ala Ala Ile His 1 5 10 15

Ser Asp Ser Ala Ala Ala Pro Gly Gly Gly Gly Ala Ala Arg Asp Phe

Phe Phe Phe Gln Thr Asp Arg Gly Ala Ala Ala Asp Met Ser Thr Pro $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ala Arg Arg Leu Met Arg Asp Phe Lys Arg Leu Gln Glu Asp Pro 50 60

Pro Val Gly Val Ser Gly Ala Pro Ser Glu Asn Asn Ile Met Gln Trp 65 70 75 80

Asn Ala Val Ile Phe Gly Pro Glu Gly Thr Pro Phe Glu Asp Gly Thr 85 90 95

Phe Lys Leu Val Ile Glu Phe Ser Glu Glu Tyr Pro Asn Lys Pro Pro 100 105 110

Thr Val Arg Phe Leu Ser Lys Met Phe His Pro Asn Val Tyr Ala Asp 115 120 125

Gly Ser Ile Cys Leu Asp Ile Leu Gln Asn Arg Trp Ser Pro Thr Tyr 130 135 140

Asp Val Ser Ser Ile Leu Thr Ser Ile Gln Ser Leu Leu Asp Glu Pro 145 150 155 160

Asn Pro Asn Ser Pro Ala Asn Ser Gln Ala Ala Gln Leu Tyr Gln Glu
165 170 175

Asn Lys Arg Glu Tyr Glu Lys Arg Val Ser Ala Ile Val Glu Gln Ser 180 185 190

Trp Asn Asp Ser 195

<210> 869

<211> 544

<212> PRT

<213> Homo sapiens

<220>

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<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

WO 00/55350

~24	.0-														
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<22	2> (9)													
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<40	0> 8	69													
Ala 1	_	Ala	Trp	Val		Xaa	Ala	Хаа	Ala 10		Ser	Gly	Leu	Val	
Ala	Arg	Pro	Thr 20		Ala	. Val	Pro	Ala 25		Pro	Arg	Pro	Phe 30	-	Pro
Ser	Pro	Pro 35	His	Leu	Ala	Ala	Met 40	-	Leu	Arg	Arg	Leu 45		Leu	Phe
Pro	Gly 50		Ala	Leu	Leu	Leu 55		Ala	Ala	Arg	Leu 60		Ala	Ala	. Ser
Asp 65		Leu	Glu	Leu	Thr 70		Asp	Asn	Phe	Glu 75		Arg	Ile	Ser	Asp 80
Thr	Gly	Ser	Ala	Gly 85	Leu	Met	Leu	Val	Glu 90		Phe	Ala	Pro	Trp 95	_
Gly	His	Cys	Lys 100	Arg	Leu	Ala	Pro	Glu 105		Gļu	Ala	Ala	Ala 110	Thr	Arg
Leu	Lys	Gly 115	Ile	Val	Pro	Leu	Ala 120	Lys	Val	Asp	Cys	Thr 125	Ala	Asn	Thr
Asn	Thr 130	Cys	Asn	Lys	Tyr	Gly 135		Ser	Gly	Tyr	Pro 140	Thr	Leu	Lys	Ile
Phe 145	Arg	Asp	Gly	Glu	Glu 150	Ala	Gly	Ala	туг	Asp 155	Gly	Pro	Arg	Thr	Ala 160
Asp	Gly	Ile	Val	Ser 165	His	Leu	Lys	Lys	Gln 170		Gly	Pro	Ala	Ser 175	Val
Pro	Leu	Arg	Thr 180	Glu	Glu	Glu	Phe	Lys 185	Lys	Phe	Ile	Ser	Asp 190	Lys	Asp
Ala	Ser	Ile 195	Val	Gly	Phe	Phe	Asp 200	Asp	Ser	Phe	Ser	Glu 205	Ala	His	Ser
Glu	Phe 210	Leu	Lys	Ala	Ala	Ser 215	Asn	Leu	Arg	Asp	Asn 220	Tyr	Arg	Phe	Ala
His 225	Thr	Asn	Val	Glu	Ser 230	Leu	Val	Asn	Glu	Tyr 235	Asp	Asp	Asn	Gly	Glu 240

- Gly Ile Ile Leu Phe Arg Pro Ser His Leu Thr Asn Lys Phe Glu Asp 245 250 255
- Lys Thr Val Ala Tyr Thr Glu Gln Lys Met Thr Ser Gly Lys Ile Lys 260 265 270
- Lys Phe Ile Gln Glu Asn Ile Phe Gly Ile Cys Pro His Met Thr Glu 275 280 285
- Asp Asn Lys Asp Leu Ile Gln Gly Lys Asp Leu Leu Ile Ala Tyr Tyr 290 295 300
- Asp Val Asp Tyr Glu Lys Asn Ala Lys Gly Ser Asn Tyr Trp Arg Asn 305 310 315 320
- Arg Val Met Met Val Ala Lys Lys Phe Leu Asp Ala Gly His Lys Leu 325 330 335
- Asn Phe Ala Val Ala Ser Arg Lys Thr Phe Ser His Glu Leu Ser Asp 340 345 350
- Phe Gly Leu Glu Ser Thr Ala Gly Glu Ile Pro Val Val Ala Ile Arg 355 360 365
- Thr Ala Lys Gly Glu Lys Phe Val Met Gln Glu Glu Phe Ser Arg Asp 370 375 380
- Gly Lys Ala Leu Glu Arg Phe Leu Gln Asp Tyr Phe Asp Gly Asn Leu 385 390 395 400
- Lys Arg Tyr Leu Lys Ser Glu Pro Ile Pro Glu Ser Asn Asp Gly Pro 405 410 415
- Val Lys Val Val Val Ala Glu Asn Phe Asp Glu Ile Val Asn Asn Glu 420 425 430
- Asn Lys Asp Val Leu Ile Glu Phe Tyr Ala Pro Trp Cys Gly His Cys 435 440 445
- Lys Asn Leu Glu Pro Lys Tyr Lys Glu Leu Gly Glu Lys Leu Ser Lys 450 455 460
- Asp Pro Asn Ile Val Ile Ala Lys Met Asp Ala Thr Ala Asn Asp Val 465 470 475 480
- Pro Ser Pro Tyr Glu Val Arg Gly Phe Pro Thr Ile Tyr Phe Ser Pro 485 490 495
- Ala Asn Lys Lys Leu Asn Pro Lys Lys Tyr Glu Gly Gly Arg Glu Leu 500 505 510

Ser Asp Phe Ile Ser Tyr Leu Gln Arg Glu Ala Thr Asn Pro Pro Val

Ile Gln Glu Glu Lys Pro Lys Lys Lys Lys Lys Ala Gln Glu Asp Leu 530 535 540

<210> 870

<211> 111

<212> PRT

<213> Homo sapiens

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<222> (3)

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<220>

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<222> (17)

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<400> 870

Arg Arg Xaa Ala Ile Phe Thr Cys Glu Val Pro Gly Val Tyr Tyr Phe
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Xaa Tyr His Val His Cys Lys Gly Gly Asn Val Trp Val Ala Leu Phe 20 25 30

Lys Asn Asn Glu Pro Val Met Tyr Thr Tyr Asp Glu Tyr Lys Lys Gly
35 40 45

Phe Leu Asp Gln Ala Ser Gly Ser Ala Val Leu Leu Leu Arg Pro Gly 50 55 60

Asp Arg Cys Ser Ser Arg Cys Pro Gln Asn Arg Leu Gln Asp Cys Met 65 70 75 80

Pro Gly Ser Met Ser Thr Pro Pro Phe Gln Asp Ile Tyr Cys Ile Pro 85 90 95

Cys Lys Asn Lys Lys Thr Lys Asn Lys Glu Lys Lys Glu Ile Leu 100 105 110 WO 00/55350

PCT/US00/05882

819

<210> 871

<211> 124

<212> PRT

<213> Homo sapiens

<400> 871

Tyr Ala Glu Cys Gly Leu Arg Ile Leu Ala Phe Pro Cys Asn Gln Phe 20 25 30

Gly Lys Gln Glu Pro Gly Ser Asn Glu Glu Ile Lys Glu Phe Ala Ala 35 40 45

Gly Tyr Asn Val Lys Phe Asp Met Phe Ser Lys Ile Cys Val Asn Gly 50 60

Asp Asp Ala His Pro Leu Trp Lys Trp Met Lys Ile Gln Pro Lys Gly 65 70 75 80

Lys Gly Ile Leu Gly Asn Ala Ile Lys Trp Asn Phe Thr Lys Phe Leu 85 90 95

Ile Asp Lys Asn Gly Cys Val Val Lys Arg Tyr Gly Pro Met Glu Glu
100 105 110

Pro Leu Val Ile Glu Lys Asp Leu Pro His Tyr Phe 115 120

<210> 872

<211> 35

<212> PRT

<213> Homo sapiens

<400> 872

Ser Gln His Phe Gly Arg Pro Arg Gln Ala Glu His Leu Lys Glu Phe 1 5 10 15

Lys Thr Ser Val Ala Asn Val Val Asn Pro Val Ser Thr Lys Asn Thr
20 25 30

Lys Ile Val

35

<210> 873

<211> 420

	3> E	Iomo	sapi	ens											
Val	0> 8 Cys	. –	Gln		-	Gln	Ser	Thr			Cys	Pro	Leu	_	Tyr
l Leu	Ala	Ser	Thr	5 Ala		Asn	Asp	Cys	10 Gly		Thr	Thr	Thr	15 Thr	Cys
Leu	Pro	Asp	20		Cvs	Val	His	25 Ara		Thr	Ile	Tvr	30 Pro		Gly
		35					40					45			_
GIN	50	_	GLu	GLu	GTÅ	Cys 55	Asp	Val	Cys	Thr	Cys 60	Thr	Asp	Met	Glu
Asp 65	Ala	Val	Met	Gly	Leu 70	Arg	Val	Ala	Gln	Cys 75	Ser	Gln	Lys	Pro	Cys 80
Glu	Asp	Ser	Cys	Arg 85	Ser	Gly	Phe	Thr	Tyr 90		Leu	His	Glu	Gly 95	Glu
Cys	Cys	Gly	Arg 100	Cys	Leu	Pro	Ser	Ala 105	Суз	Glu	Val	Val	Thr 110	Gly	Ser
Pro	Arg	Gly 115	Asp	Ser	Gln	Ser	Ser 120	Trp	Lys	Ser	Val	Gly 125	Ser	Gln	Trp
Ala	ser 130	Pro	Glu	Asn	Pro	Cys 135	Leu	Ile	Asn	Glu	Cys 140	Val	Arg	Val	Lys
Glu 145	Glu	Val	Phe	Ile	Gln 150	Gln	Arg	Asn	Val	Ser 155	Cys	Pro	Gln	Leu	Glu 160
Val	Pro	Val	Cys	Pro 165	Ser	Gly	Phe	Gln	Leu 170	Ser	Cys	Lys	Thr	Ser 175	Ala
Cys	Cys	Pro	Ser 180	Cys	Arg	Cys	Glu	Arg 185	Met	Glu	Ala	Сув	Met 190	Leu	Asn
Gly	Thr	Val 195	Ile	Gly	Pro	Gly	Lys 200	Thr	Val	Met	Ile	Asp 205	Val	Cys	Thr
Fhr	Cys 210	Arg	Суз	Met	Val	Gln 215	Val	Gly	Val	Ile	Ser 220	Gly	Phe	Lys	Leu
31u 225	Суз	Arg	Lys	Thr	Thr 230	Cys	Asn	Pro	Cys	Pro 235	Leu	Gly	Tyr	Lys	Glu 240
31u	Asn	Asn	Thr	Gly 245	Glu	Сув	Cys	Gly	Arg 250	Cys	Leu	Pro	Thr	Ala 255	Суз

821

Thr Ile Gln Leu Arg Gly Gly Gln Ile Met Thr Leu Lys Arg Asp Glu
260 265 270

Thr Leu Gln Asp Gly Cys Asp Thr His Phe Cys Lys Val Asn Glu Arg 275 280 285

Gly Glu Tyr Phe Trp Glu Lys Arg Val Thr Gly Cys Pro Pro Phe Asp 290 295 300

Glu His Lys Cys Leu Ala Glu Gly Gly Lys Ile Met Lys Ile Pro Gly 305 310 315 320

Thr Cys Cys Asp Thr Cys Glu Glu Pro Glu Cys Asn Asp Ile Thr Ala 325 330 335

Arg Leu Gln Tyr Val Lys Val Gly Ser Cys Lys Ser Glu Val Glu Val 340 345 350

Asp Ile His Tyr Cys Gln Gly Lys Cys Ala Ser Lys Ala Met Tyr Ser 355 360 365

Ile Asp Ile Asn Asp Val Gln Asp Gln Cys Ser Cys Cys Ser Pro Thr 370 375 380

Arg Thr Glu Pro Met Gln Val Ala Leu His Cys Thr Asn Gly Ser Val 385 390 395 400

Val Tyr His Glu Val Leu Asn Ala Met Glu Cys Lys Cys Ser Pro Arg
405 410 415

Lys Cys Ser Lys

<210> 874

<211> 151

<212> PRT

<213> Homo sapiens

<220>

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<222> (90)

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<220>

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<222> (103)

<223> Xaa equals any of the naturally occurring L-amino acids

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	0> 8 G1r		Pro	His 5		Arg	Ala	Val	Arg	_	Gly	Arg	Gly	Gly 15	-
Arg	Ser	Arg	Gly 20	Ser		Leu	Thr	Tyr 25		Cys	Met	Arg	Arg 30		Ser
Ser	Ser	Ile 35		Ser	Pro	Lys	Phe	Asn	Ser	Leu	Ala	Val 45	Val	Leu	Gln
Arg	Arg	_	Trp	Glu	Asn	Pro 55	_	Val	Thr	Gln	Leu 60	Asn	Arg	Leu	Ala
Ala 65	His	Pro	Pro	Phe	Ala 70	Ser	Trp	Arg	Asn	Ser 75	Glu	Glu	Ala	Arg	Thr 80
Asp	Ser	Pro	Phe	Pro 85	Asn	Ser	Cys	Ala	Xaa 90		Met	Ala	Asn	Gly 95	Asp
Ala	Pro	Cys	Met 100	Gly	Ala	Xaa	Lys	Arg 105	Gly	Gly	Cys	Gly	Gly 110	Tyr	Ala
Gln	Trp	Thr 115	Arg	Tyr	Thr	Cys	Gln 120	Arg	Pro	Ser	Ala	Arg 125	Ser	Phe	Arg
Phe	Leu 130	Pro	Phe	Leu	Ser	Arg 135	His	Val	Arg	Arg	Leu 140	Ser	Pro	Xaa	Ser
Ser 145	Lys	Ser	Val	Gly	Ser 150	Leu									
<210 <211 <212 <213	> 9! > PI	5	sapie	ens											
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10

30

Leu Lys Lys His Ile Thr Leu Leu Cys Asp Arg Leu Ser Lys Gly Gly 25

Arg Leu Cys Leu Ser Thr Asp Ala Ala Pro Gln Thr Met Val Met

823

35 40 45 Pro Gly Gly Cys Thr Thr Ile Pro Glu Ser Asp Leu Glu Glu Arg Ser 50 55 Val Glu Gln Asp Ser Thr Glu Leu Phe Thr Asn His Arg His Leu Thr 70 75 Ala Glu Thr Pro Arg Pro Val Ser Pro Leu Gln Gly Val Ser Glu 85 90 <210> 876 <211> 238 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (7) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (15) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (20) <223> Xaa equals any of the naturally occurring L-amino acids <400> 876 Thr Lys Lys Ala Leu Glu Xaa Ser Asn Xaa Arg Phe Ala Ala Xaa Phe 5 10 Phe Arg Thr Xaa Trp Asn Pro Pro Gly Ala Phe Lys Glu Phe Gly Thr Ser Leu Leu Arg Arg Arg Gly Ser Gly Ala Asn Met Pro Val Ala

40

55

Arg Ser Trp Val Cys Arg Lys Thr Tyr Val Thr Pro Arg Arg Pro Phe

35

Glu Lys Ser Arg Leu Asp Gln Glu Leu Lys Leu Ile Gly Glu Tyr Gly 65 70 75 80

Leu Arg Asn Lys Arg Glu Val Trp Arg Val Lys Phe Thr Leu Ala Lys 85 90 95

Ile Arg Lys Ala Ala Arg Glu Leu Leu Thr Leu Asp Glu Lys Asp Pro 100 105 110

Arg Arg Leu Phe Glu Gly Asn Ala Leu Leu Arg Arg Leu Val Arg Ile 115 120 125

Gly Val Leu Asp Glu Gly Lys Met Lys Leu Asp Tyr Ile Leu Gly Leu 130 135 140

Lys Ile Glu Asp Phe Leu Glu Arg Arg Leu Gln Thr Gln Val Phe Lys 145 150 155 160

Leu Gly Leu Ala Lys Ser Ile His His Ala Arg Val Leu Ile Arg Gln 165 170 175

Arg His Ile Arg Val Arg Lys Gln Val Val Asn Ile Pro Ser Phe Ile 180 185 190

Val Arg Leu Asp Ser Gln Lys His Ile Asp Phe Ser Leu Arg Ser Pro 195 200 205

Tyr Gly Gly Gly Arg Pro Gly Arg Val Lys Arg Lys Asn Ala Lys Lys 210 215 220

Gly Gln Gly Gly Ala Gly Ala Gly Asp Asp Glu Glu Glu Asp 225 235

<210> 877

<211> 79

<212> PRT

<213> Homo sapiens

<400> 877

Ala Gly Ile Arg His Glu Pro Ser Ala Ala Ala Met Ser Ser Gly Ala

1 5 10 15

Ser Ala Ser Ala Leu Gln Arg Leu Val Glu Gln Leu Lys Leu Glu Ala 20 25 30

Gly Val Glu Arg Ile Lys Val Ser Gln Ala Ala Ala Glu Leu Gln Gln 35 40 45

Tyr Cys Met Gln Asn Ala Cys Lys Asp Ala Leu Leu Val Gly Val Pro

825

50 55 60

Ala Gly Ser Asn Pro Phe Arg Glu Pro Arg Ser Cys Ala Leu Leu 65 70 75

<210> 878

<211> 136

<212> PRT

<213> Homo sapiens

<400> 878

Ile Ala Ile Met Asn Asp Thr Val Thr Ile Arg Thr Arg Lys Phe Met

1 10 15

Thr Asn Arg Leu Leu Gln Arg Lys Gln Met Val Ile Asp Val Leu His
20 25 30

Pro Gly Lys Ala Thr Val Pro Lys Thr Glu Ile Arg Glu Lys Leu Ala 35 40 45

Lys Met Tyr Lys Thr Thr Pro Asp Val Ile Phe Val Phe Gly Phe Arg 50 55 60

Thr His Phe Gly Gly Gly Lys Thr Thr Gly Phe Gly Met Ile Tyr Asp 65 70 75 80

Ser Leu Asp Tyr Ala Lys Lys Asn Glu Pro Lys His Arg Leu Ala Arg 85 90 95

His Gly Leu Tyr Glu Lys Lys Lys Thr Ser Arg Lys Gln Arg Lys Glu 100 105 110

Arg Lys Asn Arg Met Lys Lys Val Arg Gly Thr Ala Lys Ala Asn Val 115 120 125

Gly Ala Gly Lys Lys Pro Lys Glu 130 135

<210> 879

<211> 141

<212> PRT

<213> Homo sapiens

<400> 879

Gly Cys Val Gly Val Arg Pro Ser Leu His Pro Ala Thr Ser Thr Ala 1 5 10 15

826

Ser Gly Ser Ala Ser Pro Thr Leu Ala Arg Ala Met Ala Ser Val Ser 20 25 30

Glu Leu Ala Cys Ile Tyr Ser Ala Leu Ile Leu His Asp Asp Glu Val 35 40 45

Thr Val Thr Glu Asp Lys Ile Asn Ala Leu Ile Lys Ala Ala Gly Val 50 60

Asn Val Glu Pro Phe Trp Pro Gly Leu Phe Ala Lys Ala Leu Ala Asn 65 70 75 80

Val Asn Ile Gly Ser Leu Ile Cys Asn Val Gly Ala Gly Gly Pro Ala 85 90 95

Pro Ala Ala Gly Ala Ala Pro Ala Gly Gly Pro Ala Pro Ser Thr Ala 100 105 110

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<220>

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<220>

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<222> (128)

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<220>

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<220>

827

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Ile	Glu	Glu	Pro	Arq	Asp	Thr	Arq	Leu	Gln	Val	Cys	Ser	Xaa	Val	His
1				5	-		_		10		•			15	
Ile	Tro	Cvs	Leu	Asp	Lvs	Phe	Lvs	Met	Ara	Lvs	His	Ara	His	Leu	Pro
		-1	20	_	-1-		-1-	25	_	2		2	30		
T.eu	Wa 1	Δla	t/al	Dhe	Cva	T.e.11	Phe	T.e.ii	Ser	Glv	Dhe	Pro	Thr	Thr	His
200	Val	35		1110	CYS	ыси	40	n. u	001	OTY	2 110	45	****	1	1113
		"					40					43			
77.	<i>~</i> 1 ~	c1-	~1 m	G1 m	71.	*** 1	T1.	<i>~</i> 1	17-1	7	T	7	7	7 1.	*** 1
Ата			GIII	GIII	ALd		тте	GLU	val	ASII	-	ALG	ASD	116	Val
	50					55					60				
	_	•	_		_	_		_		_		_	•	_	
	Leu	Val	Asp	Gly		Ser	Ala	Leu	Gly		Ala	Asn	Phe	Asn	Ala
65					70					75					80
Ile	Arg	Asp	Phe	Ile	Ala	Lys	Val	Ile	Gln	Arg	Leu	Glu	Ile	Gly	Gln
				85					90					95	
Asp	Leu	Ile	Gln	Val	Ala	Val	Ala	Gln	Tyr	Ala	Asp	Thr	Val	Arg	Pro
			100					105					110		
Glu	Phe	Tyr	Phe	Asn	Thr	His	Pro	Thr	Lys	Arg	Xaa	Val	Ile	Thr	Ala
		115					120		-	_		125			
Val	Ara	Lvs	Met	Lvs	Pro	Leu	xaa	Glv	Ser	Ala	Leu	Tvr	Thr	Glv	Ser
	130			-4-		135		1			140	-4-		1	
Δla	T.Ou	Aen	Dho	17 a 1	λrα	Nen	λen	Tan	Phe	Th.	Ser	Sor	7) a	Glw	Mitt.
145	ыси	Y10P	1110	VUL	150	AJII	*1511	БСС	Tine	155	DEI	561	nia	Gry	160
143					130					133					100
7	71-	*1-	~ 2	~1	-1-	D	r	+	T	V	T	-1 -	mb	a 1	~ 1
Arg	Ата	ATG	GIU	-	TTE	PIO	гуя	ren		хаа	Leu	тте	Thr	-	GIY
				165					170					175	
							_			_					
Lys	Ser	Leu	_	Glu	Ile	Ser	Gln		Ala	Gln	Glu	Leu	_	Arg	ser
			180					185					190		
Ser	Ile	Met	Ala	Phe	Ala	Ile	Gly	Asn	Lys	Gly	Ala	Asp	Gln	Ala	Glu
		195					200					205			
Leu	Glu	Glu	Ile	Ala	Phe	Asp	ser	Ser	Leu	Val	Phe	Ile	Pro	Ala	Glu
	210					215					220				

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Phe Arg Ala Ala Pro Leu Gln Gly Met Leu Pro Gly Leu Leu Ala Pro
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Leu Arg Thr Leu Ser Gly Thr Pro Glu Val His Ser Asn Lys Arg Asp
                                     250
Ile Ile Phe Leu
            260
<210> 882
<211> 149
<212> PRT
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Xaa Xaa Glu Ser Glu Xaa Ser Phe Xaa Cys Arg Lys Xaa Ile Ile Xaa

Phe Leu Xaa Tyr Lys Arg Val Val Phe Leu Lys Gln Leu Ala Ser Gly

Leu Leu Leu Val Thr Gly Pro Leu Val Leu Asn Arg Val Pro Leu Arg 40

Arg Thr His Gln Lys Phe Val Ile Ala Thr Ser Thr Lys Ile Asp Ile 55

Ser Asn Val Lys Ile Pro Lys His Leu Thr Asp Ala Tyr Phe Lys Lys 70

Lys Lys Leu Arg Lys Pro Arg His Gln Glu Gly Glu Ile Phe Asp Thr

Glu Lys Glu Lys Tyr Glu Ile Thr Glu Gln Arg Lys Ile Asp Gln Lys

Ala Val Asp Ser Gln Ile Leu Pro Lys Ile Lys Ala Ile Pro Gln Leu

Gln Gly Tyr Leu Arg Ser Val Phe Ala Leu Thr Asn Gly Ile Tyr Pro 135

His Lys Leu Val Phe 145

<210> 883

<211> 256

<212> PRT

<213> Homo sapiens

<400> 883

Trp Lys Ser Val Val Val Leu Ala Val Ser Ala Gly Ala Gly Ser Ala

His Pro Arg Gln Asn Lys Tyr Ser Val Leu Leu Pro Thr Tyr Asn Glu 25

Arg Glu Asn Leu Pro Leu Ile Val Trp Leu Leu Val Lys Ser Phe Ser 40

Glu Ser Gly Ile Asn Tyr Glu Ile Ile Ile Asp Asp Gly Ser Pro 55 60

PCT/US00/05882

_	_		_		_		_		_		_		_		
65					70					75					80
ASP	GTÅ	THE	Arg	Asp	val	ATG	GIU	GTU	Leu	GIU	Lys	TTG	TYL	GTA	ser

- Asp Arg Ile Leu Leu Arg Pro Arg Glu Lys Lys Leu Gly Leu Gly Thr 85 90 95
- Ala Tyr Ile His Gly Met Lys His Ala Thr Gly Asn Tyr Ile Ile Ile 100 105 110
- Met Asp Ala Asp Leu Ser His His Pro Lys Phe Ile Pro Glu Phe Ile 115 120 125
- Arg Lys Gln Lys Glu Gly Asn Phe Asp Ile Val Ser Gly Thr Arg Tyr 130 135 140
- Ser Arg Gly Ala Asn Phe Leu Thr Gln Ile Leu Leu Arg Pro Gly Ala 165 170 175
- Ser Asp Leu Thr Gly Ser Phe Arg Leu Tyr Arg Lys Glu Val Leu Glu
 180 185 190
- Lys Leu Ile Glu Lys Cys Val Ser Lys Gly Tyr Val Phe Gln Met Glu 195 200 205
- Met Ile Val Arg Ala Arg Gln Leu Asn Tyr Thr Ile Gly Glu Val Pro 210 215 220
- Ile Ser Phe Val Asp Arg Val Tyr Gly Glu Ser Lys Leu Gly Gly Asn 225 230 230 235
- Glu Ile Val Ser Phe Leu Lys Gly Leu Leu Thr Leu Phe Ala Thr Thr 245 250 255

<210> 884

WO 00/55350

<211> 449

<212> PRT

<213> Homo sapiens

<400> 884

Gly Gly Ser Trp Cys Arg Ser Ser Pro Gly Arg Asp Gly Ser Pro Gly
1 5 10 15

Ala	Lys	Gly	Asp 20	_	Gly	Glu	Thr	Gly 25		Ala	Gly	Pro	Pro 30	Gly	Ala
Pro	Gly	Ala 35		Gly	Ala	Pro	Gly 40		Val	Gly	Pro	Ala 45	Gly	Lys	Ser
Gly	Asp 50	_	Gly	Glu	Thr	Gly 55		Ala	Gly	Pro	Ala 60	Gly	Pro	Val	Gly
Pro 65	Val	Gly	Ala	Arg	Gly 70	Pro	Ala	Gly	Pro	Gln 75	Gly	Pro	Arg	Gly	Asp 80
Lys	Gly	Glu	Thr	Gly 85	Glu	Gln	Gly	Asp	Arg 90	Gly	Ile	Lys	Gly	His 95	Arg
Gly	Phe	Ser	Gly 100	Leu	Gln	Gly	Pro	Pro 105	Gly	Pro	Pro	Gly	Ser 110	Pro	Gly
Glu	Gln	Gly 115	Pro	Ser	Gly	Ala	Ser 120	Gly	Pro	Ala	Gly	Pro 125	Arg	Gly	Pro
Pro	Gly 130	Ser	Ala	Gly	Ala	Pro 135	Gly	Lys	Asp	Gly	Leu 140	Asn	Gly	Leu	Pro
Gly 145	Pro	Ile	Gly	Pro	Pro 150	Gly	Pro	Arg	Gly	Arg 155	Thr	Gly	Asp	Ala	Gly 160
Pro	Val	Gly	Pro	Pro 165	Gly	Pro	Pro	Gly	Pro 170	Pro	Gly	Pro	Pro	Gly 175	Pro
Pro	Ser	Ala	Gly 180	Phe	Asp	Phe	Ser	Phe 185	Leu	Pro	Gln	Pro	Pro 190	Gln	Glu
Lys	Ala	His 195	Asp	Gly	Gly	Arg	Tyr 200	Tyr	Arg	Ala	Asp	Asp 205	Ala	Asn	Va1
Val	Arg 210	Asp	Arg	Asp	Leu	Glu 215	Val	Asp	Thr	Thr	Leu 220	Lys	Ser	Leu	Ser
Gln 225	Gln	Ile	Glu	Asn	Ile 230	Arg	Ser	Pro	Glu	Gly 235	Ser	Arg	Lys	Asn	Pro 240
Ala	Arg	Thr	Cys	Arg 245	Asp	Leu	Lys	Met	Cys 250	His	Ser	Asp	Trp	Lys 255	Ser
Gly	Glu	Tyr	Trp 260	Ile	Asp	Pro	Asn	Gln 265	Gly	Cys	Asn	Leu	Asp 270	Ala	Ile

Lys Val Phe Cys Asn Met Glu Thr Gly Glu Thr Cys Val Tyr Pro Thr 275 280 285

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Gln Pro Ser Val Ala Gln Lys Asn Trp Tyr Ile Ser Lys Asn Pro Lys

Asp Lys Arg His Val Trp Phe Gly Glu Ser Met Thr Asp Gly Phe Gln 305 310 315 320

Phe Glu Tyr Gly Gly Gln Gly Ser Asp Pro Ala Asp Val Ala Ile Gln 325 330 335

Leu Thr Phe Leu Arg Leu Met Ser Thr Glu Ala Ser Gln Asn Ile Thr 340 345 350

Tyr His Cys Lys Asn Ser Val Ala Tyr Met Asp Gln Gln Thr Gly Asn 355 360 365

Leu Lys Lys Ala Leu Leu Eu Gln Gly Ser Asn Glu Ile Glu Ile Arg 370 375 380

Ala Glu Gly Asn Ser Arg Phe Thr Tyr Ser Val Thr Val Asp Gly Cys 385 390 395 400

Thr Ser His Thr Gly Ala Trp Gly Lys Thr Val Ile Glu Tyr Lys Thr 405 410 415

Thr Lys Thr Ser Arg Leu Pro Ile Ile Asp Val Ala Pro Leu Asp Val
420 425 430

Gly Ala Pro Asp Gln Glu Phe Gly Phe Asp Val Gly Pro Val Cys Phe 435 440 445

Leu

<210> 885

<211> 64

<212> PRT

<213> Homo sapiens

<400> 885

Gly Lys Leu Val Thr Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp
1 5 10 15

Pro Arg Val Arg Trp Gly Phe Thr Lys Phe Asn Ala Asp Glu Phe Glu 20 25 30

Asp Met Val Ala Glu Lys Arg Leu Ile Pro Asp Gly Cys Gly Val Lys 35 40 45

Tyr Ile Pro Ser Arg Gly Pro Leu Asp Lys Trp Arg Ala Leu His Ser

834

•

50 55 60

<210> 886

<211> 132

<212> PRT

<213> Homo sapiens

<400> 886

Thr Thr Leu Arg Ala Leu Ala Leu Asn Leu Trp Pro Pro Lys Ser Arg
1 5 10 15

Ser Leu Ile Ser Ser Trp Gln Ser Cys Gly Gln Glu Val Leu Lys Gly
20 25 30

Lys Thr His Ser Asp Asn Cys Ser Pro Ile Tyr Gln Pro Ser Ala Gly $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Val Ser Asp Arg Gly Pro Leu Pro Pro Leu Glu Cys Ala Thr Tyr Glu 50 55 60

Glu Cys Pro Met Gly Lys Arg Arg Leu Ser Cys Pro Leu Ala Ala Cys 65 70 75 80

Ala Ser Ile Pro Gly Gln Lys Phe Pro Gln Glu Pro Leu Ala Leu Ala 85

Gln Ser His Cys Glu Arg Arg Trp Glu Pro Thr Pro Leu Gly Glu Gly 100 105 110

Ala Val Leu Leu Gly Thr Ser Gln His Gln Val Arg Ser Leu Lys Leu 115 120 125

Lys Asn Val Asn 130

<210> 887

<211> 70

<212> PRT

<213> Homo sapiens

<400> 887

Gly Leu Ser Ser Glu Ala Arg Glu Lys Ser Ser Glu Pro Gln Glu Arg

835

Ser Ser Glu Pro Trp Glu Arg Ser Ser Glu Pro Trp Glu Gly Leu Val $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$

Thr Phe Glu Asp Val Ala Val Glu Phe Thr Gln Glu Glu Trp Ala Leu
35 40 45

Leu Asp Pro Ala Gln Arg Thr Leu Tyr Arg Asp Val Met Leu Glu Asn 50 55 60

Cys Arg Thr Trp Pro His

<210> 888

<211> 373

<212> PRT

<213> Homo sapiens

<400> 888

Val Asp Pro Arg Val Arg Phe Arg Glu Glu Phe Leu Phe Ser Ser Leu

1 5 10 15

Gln Glu Gly Arg Asp Lys Asp Thr Phe Ser Lys Met Ala Met Val Ser 20 25 30

Glu Phe Leu Lys Gln Ala Trp Phe Ile Glu Asn Glu Glu Glu Glu Tyr 35 40 45

Val Gln Thr Val Lys Ser Ser Lys Gly Gly Pro Gly Ser Ala Val Ser 50 55 60

Pro Tyr Pro Thr Phe Asn Pro Ser Ser Asp Val Ala Ala Leu His Lys 65 70 75 80

Ala Ile Met Val Lys Gly Val Asp Glu Ala Thr Ile Ile Asp Ile Leu 85 90 95

Thr Lys Arg Asn Asn Ala Gln Arg Gln Gln Ile Lys Ala Ala Tyr Leu 100 105 110

Gln Glu Thr Gly Lys Pro Leu Asp Glu Thr Leu Lys Lys Ala Leu Thr 115 120 125

Gly His Leu Glu Glu Val Val Leu Ala Leu Leu Lys Thr Pro Ala Gln 130 135 140

Phe Asp Ala Asp Glu Leu Arg Ala Ala Met Lys Gly Leu Gly Thr Asp 145 150 155 160

Glu Asp Thr Leu Ile Glu Ile Leu Ala Ser Arg Thr Asn Lys Glu Ile

165 170 175 Arg Asp Ile Asn Arg Val Tyr Arg Glu Glu Leu Lys Arg Asp Leu Ala 185 Lys Asp Ile Thr Ser Asp Thr Ser Gly Asp Phe Arg Asn Ala Leu Leu 200 Ser Leu Ala Lys Gly Asp Arg Ser Glu Asp Phe Gly Val Asn Glu Asp 215 Leu Ala Asp Ser Asp Ala Arg Ala Leu Tyr Glu Ala Gly Glu Arg Arg 235 Lys Gly Thr Asp Val Asn Val Phe Asn Thr Ile Leu Thr Thr Arg Ser 250 Tyr Pro Gln Leu Arg Arg Val Phe Gln Lys Tyr Thr Lys Tyr Ser Lys 265 His Asp Met Asn Lys Val Leu Asp Leu Glu Leu Lys Gly Asp Ile Glu 280 Lys Cys Leu Thr Ala Ile Val Lys Cys Ala Thr Ser Lys Pro Ala Phe 295 Phe Ala Glu Lys Leu His Gln Ala Met Lys Gly Val Gly Thr Arg His Lys Ala Leu Ile Arg Ile Met Val Ser Arg Ser Glu Ile Asp Met Asn Asp Ile Lys Ala Phe Tyr Gln Lys Met Tyr Gly Ile Ser Leu Cys Gln Ala Ile Leu Asp Glu Thr Lys Gly Asp Tyr Glu Lys Ile Leu Val Ala 355 360 Leu Cys Gly Gly Asn 370

<210> 889

<211> 336

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

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<223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (51)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (60)
 <223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (183)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 889
Gly Arg Lys Lys His Leu Xaa Ala Arg Leu Val Thr Glu Met Asp Ser
Lys Tyr Gln Cys Val Lys Leu Asn Asp Gly His Phe Met Pro Val Leu
                                 25
Gly Phe Gly Thr Tyr Ala Pro Ala Glu Val Pro Lys Ser Lys Ala Leu
Glu Ala Xaa Lys Leu Ala Ile Glu Ala Gly Phe Xaa His Ile Asp Ser
     50
                         55
Ala His Xaa Tyr Asn Asn Glu Glu Gln Val Gly Leu Ala Ile Arg Ser
Lys Ile Ala Asp'Gly Ser Val Lys Arg Glu Asp Ile Phe Tyr Thr Ser
                 85
                                     90
Lys Leu Trp Xaa Asn Ser His Arg Pro Glu Leu Val Arg Pro Ala Leu
                                105
Glu Arg Ser Leu Lys Asn Leu Gln Leu Asp Tyr Val Asp Leu Tyr Leu
        115
                           120
```

838

Ile His Phe Pro Val Ser Val Lys Pro Gly Glu Glu Val Ile Pro Lys 130 135 140

Asp Glu Asn Gly Lys Ile Leu Phe Asp Thr Val Asp Leu Cys Ala Thr 145 150 155 160

Trp Glu Ala Val Glu Lys Cys Lys Asp Ala Gly Leu Ala Lys Ser Ile 165 170 175

Gly Val Ser Asn Phe Asn Xaa Arg Gln Leu Glu Met Ile Leu Asn Lys 180 185 190

Pro Gly Leu Lys Tyr Lys Pro Val Cys Asn Gln Val Glu Cys His Pro 195 200 205

Tyr Phe Asn Gln Arg Lys Leu Leu Asp Phe Cys Lys Ser Lys Asp Ile 210 215 220

Val Leu Val Ala Tyr Ser Ala Leu Gly Ser His Arg Glu Glu Pro Trp 225 230 235 240

Val Asp Pro Asn Ser Pro Val Leu Leu Glu Asp Pro Val Leu Cys Ala 245 250 255

Leu Ala Lys Lys His Lys Arg Thr Pro Ala Leu Ile Ala Leu Arg Tyr
260 265 270

Gln Leu Gln Arg Gly Val Val Val Leu Ala Lys Ser Tyr Asn Glu Gln 275 280 285

Arg Ile Arg Gln Asn Val Gln Val Phe Glu Phe Gln Leu Thr Ser Glu 290 295 300

Glu Met Lys Ala Ile Asp Gly Leu Asn Arg Asn Val Arg Tyr Leu Thr 305 310 315 320

Leu Asp Ile Phe Ala Gly Pro Pro Asn Tyr Pro Phe Ser Asp Glu Tyr 325 330 335

<210> 890

<211> 195

<212> PRT

<213> Homo sapiens

<400> 890

Arg Ser Ser Glu Val Tyr Ala Gln Leu Cys Asn Val Ala Arg Ile Glu Ala Glu Arg Glu Ala Gly Val His Phe Arg Pro Gly Tyr Glu Tyr Gly Pro Gly Pro Asp Asp Leu His Tyr Ser Ile Tyr Gly Pro Asp Gly Ala Pro Phe Tyr Asn Tyr Leu Gly Pro Glu Asp Thr Val Pro Glu Pro Ala Phe Pro Asn Thr Ala Gly His Ser Ala Asp Arg Thr Pro Ile Leu Glu 70 Ser Pro Leu Gln Pro Ser Glu Leu Gln Pro His Tyr Val Ala Ser His 90 Pro Glu Pro Pro Ala Gly Phe Glu Gly Leu Gln Ala Glu Glu Cys Gly 105 Ile Leu Asn Gly Cys Glu Asn Gly Arg Cys Val Arg Val Arg Glu Gly 120 Tyr Thr Cys Asp Cys Phe Glu Gly Phe Gln Leu Asp Ala Ala His Met Ala Cys Val Asp Val Asn Glu Cys Asp Asp Leu Asn Gly Pro Ala Val Leu Cys Val His Gly Tyr Cys Glu Asn Thr Glu Gly Ser Tyr Arg Cys His Cys Ser Pro Gly Tyr Val Ala Glu Ala Gly Pro Pro His Cys Thr Ala Lys Glu 195 <210> 891 <211> 198 <212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (108)

<223> Xaa equals any of the naturally occurring L-amino acids

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<220>

<221> SITE

<222> (109)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 891

Ser Ala Gly Leu Thr Gly Arg Ile Ala Phe Ala Ala Ala Arg Pro Gln $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Thr Phe Val Pro Gly Pro Ser Ser Pro Pro Pro Pro Pro Pro Pro Arg
20 25 30

Pro Ala Glu Leu Ala Pro Ser Pro Pro Ala Asp Met Ser Glu Ser Lys 35 40 45

Ser Gly Pro Glu Tyr Ala Ser Phe Phe Ala Val Met Gly Ala Ser Ala 50 55 60

Ala Met Val Phe Ser Ala Leu Gly Ala Ala Tyr Gly Thr Ala Lys Ser 65 70 75 80

Gly Thr Gly Ile Ala Ala Met Ser Val Met Arg Pro Glu Gln Ile Met 85 90 95

Lys Ser Ile Ile Pro Val Val Met Ala Gly Ile Xaa Xaa Ile Tyr Gly 100 105 110

Leu Val Val Ala Val Leu Ile Ala Asn Ser Leu Asn Asp Asp Ile Ser 115 120 125

Leu Tyr Lys Ser Phe Leu Gln Leu Gly Ala Gly Leu Ser Val Gly Leu 130 135 140

Ser Gly Leu Ala Ala Gly Phe Ala Ile Gly Ile Val Gly Asp Ala Gly 145 150 150

Val Arg Gly Asn Ala Gln Gln Pro Arg Leu Phe Val Gly Met Ile Leu 165 170 175

Ile Leu Ile Phe Ala Glu Val Leu Gly Leu Tyr Gly Leu Ile Val Ala 180 185 190

Leu Ile Leu Ser Thr Lys 195

<210> 892

<211> 95

<212> PRT

<213> Homo sapiens

<400> 892

WO 00/55350

Asp Ala Trp Ala Pro Ser Glu Ser Arg Glu Ala Leu Leu Thr Pro Pro 1 5 10 15

841

PCT/US00/05882

Pro His Arg Arg His Thr Ala Ala Ala Ser Val Met Pro Lys His Glu 20 25 30

Phe Ser Val Asp Met Thr Cys Gly Gly Cys Ala Glu Ala Val Ser Arg 35 40 45

Val Leu Asn Lys Leu Gly Gly Val Lys Tyr Asp Ile Asp Leu Pro Asn 50 55 60

Lys Lys Val Cys Ile Glu Ser Glu His Ser Met Asp Thr Leu Leu Ala 65 70 75 80

Thr Leu Lys Lys Thr Gly Lys Thr Val Ser Tyr Leu Gly Leu Glu 85 90 95

<210> 893

<211> 123

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (111)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (117)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 893

Gly Glu His Pro Arg Gln Pro Ala Gly Asn Asn Ile Leu Ala Val Leu

Thr Cys Cys Gln Gln Ile His Arg Thr Trp Met Lys Phe Pro Phe Pro 20 25 30

Leu Val Ser Ser Cys Ser Thr Pro Leu Leu Asp Pro Lys Ser Leu Thr 35 40 45

Lys Ala Leu Asn Thr Val Lys Met Phe Tyr Ile Pro Phe His Leu Cys 50 55 60

Cys Phe Phe Asn Cys Ile Leu Pro Asp Val Leu Met Leu Ser Leu Met

842

65 70 75 80

Leu Ile Val Ile Pro Val Arg Val His Phe Ile Phe Met Leu Phe Gln
85 90 95

Pro Cys Ile Asn Ile His Leu Thr Lys Ile Thr Gln Leu Ile Xaa Lys
100 105 110

Lys Lys Lys Asn Xaa Gly Gly Gly Pro Gly Thr 115 120

<210> 894

<211> 172

<212> PRT

<213> Homo sapiens

<400> 894

Gln Phe Val Tyr Cys Gly Lys Lys Ala Gln Leu Asn Ile Gly Asn Val

Leu Pro Val Gly Thr Met Pro Glu Gly Thr Ile Val Cys Cys Leu Glu
20 25 30

Glu Lys Pro Gly Asp Arg Gly Lys Leu Ala Arg Ala Ser Gly Asn Tyr 35 40 45

Ala Thr Val Ile Ser His Asn Pro Glu Thr Lys Lys Thr Arg Val Lys 50 60

Leu Pro Ser Gly Ser Lys Lys Val Ile Ser Ser Ala Asn Arg Ala Val 65 70 75 80

Val Gly Val Val Ala Gly Gly Gly Arg Ile Asp Lys Pro Ile Leu Lys

Ala Gly Arg Ala Tyr His Lys Tyr Lys Ala Lys Arg Asn Cys Trp Pro 100 105 110

Arg Val Arg Gly Val Ala Met Asn Pro Val Glu His Pro Phe Gly Gly 115 120 125

Gly Asn His Gln His Ile Gly Lys Pro Ser Thr Ile Arg Arg Asp Ala 130 135 140

Pro Ala Gly Arg Lys Val Gly Leu Ile Ala Ala Arg Arg Thr Gly Arg 145 150 155 160

Leu Arg Gly Thr Lys Thr Val Gln Glu Lys Glu Asn 165 170

	10>														
	11>														
	2>														
<21	.3>	Homo	sapi	iens											
<22	20>														
<22	:1>	SITE													
<22	2>	(22)													
<22	23> 2	Kaa e	equal	s an	y of	the	nat	ural	ly c	ccur	ring	L-a	mino	aci	ds
<22	0>														
<22	1> 8	SITE													
<22	2>	(37)													
<22	3> 2	Kaa €	equal	s an	y of	the	nat	ural	ly c	ccur	ring	L-a	mino	aci	ds
<40	0> 8	395													
Asn	Arq	g Glu	ı Gly	Ser	Lys	Gly	Val	Glu	Thr	Arg	Arg	Va1	Leu	Val	Gly
1				5					10					15	
Glu	Glr	Gln	Gln	Cys	Xaa	Asp	Ala	Lys	Ser	Gln	Gln	Lys	Glu	Gln	Met
			20					25					30		
_	_	_													
Leu	Let		Glu	Xaa	Lys	Ser		Ala	Tyr	Ser	Gln		Leu	Leu	Arg
		35	•				40					45			
Cvc	TO	mb-		T 0	61 n	7	T 0.11	T 0	~1 ~	61.	776-	3	T	7	m1
Cys	50		Leu	reu	GIN	55	Leu	Leu	GIN	GIU	60	Arg	ьeu	гĀг	Thr
	50	'				55					60				
Gln	Ser	Glu	Leu	Asp	Ara	Tle	Asn	Ala	Gln	Φvr	T.e.11	Glu	Val	T.ve	Cve
65					70		110.11	2220	V	75	Dea	Q_Lu	Val	шуз	80
										,,,					00
Gly	Ala	Met	Ile	Leu	Lys	Leu	Arg	Met	Glu	Glu	Leu	Lys	Ile	Leu	Ser
_				85	-		_		90			-		95	
Asp	Thr	Tyr	Thr	Val	Glu	Lys	Val	Glu	Val	His	Arg	Leu	Ile	Arg	Asp
			100					105					110		_
Arg	Leu	Glu	Gly	Ala	Ile	His	Leu	Gln	Glu	Gln	Asp	Met	Glu	Asn	Ser
		115					120					125			
Arg		Val	Leu	Asn	Ser		Glu	Val	Leu	Gly		Glu	Phe	Asp	Arg
	130					135					140				
T		_		_			_		~1			~-	_	_	
	val	ьуs	Glu	Tyr		val	Leu	гÀг	GIN		Thr	GLu	Asn	ràs	
145					150					155					160
Tro	A1=	Len	Gln	G] ··	Dhe	Ser	T.ve	1 م	ጥህን	۵۳۰					
5	ara	₽ĠŰ	GTII	165	£ 116	PGT	пур	val	170	AL G					
				100					170						

844

<210> 897

<211> 289

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (255)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 897

Ala Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Pro Thr Arg Pro 1 5 10 15

Arg Val Arg Gly Arg Ser Gln Leu Ser Ala His Gly Pro Ala Ser Phe 20 25 30

Lys Met Ser Thr Val His Glu Ile Leu Cys Lys Leu Ser Leu Glu Gly 35 40 45

845

Asp His Ser Thr Pro Pro Ser Ala Tyr Gly Ser Val Lys Ala Tyr Thr Asn Phe Asp Ala Glu Arg Asp Ala Leu Asn Ile Glu Thr Ala Ile Lys Thr Lys Gly Val Asp Glu Val Thr Ile Val Asn Ile Leu Thr Asn Arg Ser Asn Ala Gln Arg Gln Asp Ile Ala Phe Ala Tyr Gln Arg Arg Thr Lys Lys Glu Leu Ala Ser Ala Leu Lys Ser Ala Leu Ser Gly His Leu 120 Glu Thr Val Ile Leu Gly Leu Leu Lys Thr Pro Ala Gln Tyr Asp Ala 135 Ser Glu Leu Lys Ala Ser Met Lys Gly Leu Gly Thr Asp Glu Asp Ser 150 155 Leu Ile Glu Ile Ile Cys Ser Arg Thr Asn Gln Glu Leu Gln Glu Ile 170 Asn Arg Val Tyr Lys Glu Met Tyr Lys Thr Asp Leu Glu Lys Asp Ile Ile Ser Asp Thr Ser Gly Asp Phe Arg Lys Leu Met Val Ala Leu Ala 200 Lys Gly Arg Arg Ala Glu Asp Gly Ser Val Ile Asp Tyr Glu Leu Ile 215 Asp Gln Asp Ala Arg Asp Leu Tyr Asp Ala Gly Val Lys Arg Lys Gly Thr Asp Val Pro Lys Trp Ile Ser Ile Met Thr Glu Arg Ser Xaa Pro

Thr Ser Arg Lys Tyr Leu Ile Gly Thr Arg Val Thr Ala Leu Met Thr

Cys Trp Lys Ala Ser Gly Lys Arg Leu Lys Glu Thr Trp Lys Met Leu

280

ser

846

<210> 898

<211> 232

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (205)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 898

Asn Pro Arg Gly Lys Val Ala Gly Phe Asp Leu Asp Gly Thr Leu Ile 1 5 10 15

Thr Thr Arg Ser Gly Lys Val Phe Pro Thr Gly Pro Ser Asp Trp Arg
20 25 30

Ile Leu Tyr Pro Glu Ile Pro Arg Lys Leu Arg Glu Leu Glu Ala Glu 35 40 45

Gly Tyr Lys Leu Val Ile Phe Thr Asn Gln Met Ser Ile Gly Arg Gly 50 60

Lys Leu Pro Ala Glu Glu Phe Lys Ala Lys Val Glu Ala Val Val Glu 65 70 75 80

Lys Leu Gly Val Pro Phe Gln Val Leu Val Ala Thr His Ala Gly Leu 85 90 95

Tyr Arg Lys Pro Val Thr Gly Met Trp Asp His Leu Gln Glu Gln Ala 100 105 110

Asn Asp Gly Thr Pro Ile Ser Ile Gly Asp Ser Ile Phe Val Gly Asp 115 120 125

Ala Ala Gly Arg Pro Ala Asn Trp Ala Pro Gly Arg Lys Lys Asp 130 135 140

Phe Ser Cys Ala Asp Arg Leu Phe Ala Leu Asn Leu Gly Leu Pro Phe 145 150 155 160

Ala Thr Pro Glu Glu Phe Phe Leu Lys Trp Pro Ala Ala Gly Phe Glu
165 170 175

Leu Pro Ala Phe Asp Pro Arg Thr Val Ser Arg Ser Gly Pro Leu Cys
180 185 190

Leu Pro Glu Ser Arg Ala Leu Leu Ser Ala Thr Arg Xaa Trp Leu Ser 195 200 205

Gln Trp Asp Ser Leu Gly Pro Gly Ser Pro Pro Phe Ser Arg Ser Thr

847

210 215 220

Ser Cys Arg Pro Asp Met Ser Thr 225 230

<210> 899

<211> 218

<212> PRT

<213> Homo sapiens

<400> 899

Leu Arg Val Ala Arg Pro Asp Ala Ala Arg Ala Ala Pro Leu Ala Pro 1 5 10 15

Ala Ala Ala Met Lys Ala Val Val Gln Arg Val Thr Arg Ala Ser Val
20 25 30

Thr Val Gly Glu Glu Ile Ser Ala Ile Gly Arg Gly Ile Cys Val 35 40 45

Leu Leu Gly Ile Ser Leu Glu Asp Thr Gln Lys Glu Leu Glu His Met 50 60

Val Arg Lys Ile Leu Asn Leu Arg Val Phe Glu Asp Glu Ser Gly Lys 65 70 75 80

His Trp Ser Lys Ser Val Met Asp Lys Gln Tyr Glu Ile Leu Cys Val 85 90 95

Ser Gln Phe Thr Leu Gln Cys Val Leu Lys Gly Asn Lys Pro Asp Phe 100 105 110

His Leu Ala Met Pro Thr Glu Gln Ala Glu Gly Phe Tyr Asn Ser Phe 115 120 125

Leu Glu Gln Leu Arg Lys Thr Tyr Arg Pro Glu Leu Ile Lys Asp Gly 130 135 140

Lys Phe Gly Ala Tyr Met Gln Val His Ile Gln Asn Asp Gly Pro Val 145 150 150 160

Thr Ile Glu Leu Glu Ser Pro Ala Pro Gly Thr Ala Thr Ser Asp Pro 165 170 175

Lys Gln Leu Ser Lys Leu Glu Lys Gln Gln Gln Arg Lys Glu Lys Thr 180 185 190

Arg Ala Lys Gly Pro Ser Glu Phe Lys Gln Gly Lys Lys His Ser Pro 195 200 205

Lys Arg Arg Pro Gln Cys Gln Gln Arg Gly 210 215

<210> 900

<211> 152

<212> PRT

<213> Homo sapiens

<400> 900

Ser Lys Arg Gly His Val Pro Trp Gly Leu Glu Glu Ile Leu Asp Val 1 5 10 15

Ile Glu Pro Ser Gln Phe Val Lys Ile Gln Glu Pro Leu Phe Lys Gln 20 25 30

Ile Ala Lys Cys Val Ser Ser Pro His Phe Gln Val Ala Glu Arg Ala 35 40 45

Leu Tyr Tyr Trp Asn Asn Glu Tyr Ile Met Ser Leu Ile Glu Glu Asn 50 55 60

Ser Asn Val Ile Leu Pro Ile Met Phe Ser Ser Leu Tyr Arg Ile Ser 65 70 75 80

Lys Glu His Trp Asn Pro Ala Ile Val Ala Leu Val Tyr Asn Val Leu 85 90 95

Lys Ala Phe Met Glu Met Asn Ser Thr Met Phe Asp Glu Leu Thr Ala 100 105 110

Thr Tyr Lys Ser Asp Arg Gln Arg Glu Lys Lys Lys Glu Lys Glu Arg 115 120 125

Glu Glu Leu Trp Lys Lys Leu Glu Asp Leu Glu Leu Lys Arg Gly Leu 130 135 140

Arg Arg Asp Gly Ile Ile Pro Thr 145 150

<210> 901

<211> 261

<212> PRT

<213> Homo sapiens

<400> 901

Gly Leu Arg Glu Ile Ser Gly Arg Leu Ala Glu Met Pro Ala Asp Ser

1	į			5	•				10)				15	•
Gly	туг	Pro	Ala 20		Leu	Gly	Ala	Arg 25		Ala	Ser	Phe	Tyr 30		Arç
Ala	Gly	Arg 35		Lys	Cys	Leu	Gly 40		Pro	Glu	Arg	Glu 45	_	Ser	Va]
Ser	11e	val	Gly	Ala	Val	Ser 55		Pro	Gly	Gly	Asp 60		Ser	Asp	Pro
Val 65		Ser	Ala	Thr	Leu 70		Ile	Val	Gln	Val 75		Trp	Gly	Leu	Asp 80
Lys	Lys	Leu	Ala	Gln 85	_	Lys	His	Phe	Pro 90		Val	Asn	Trp	Leu 95	
Ser	Туг	Ser	Lys 100	_	Met	Arg	Ala	Leu 105	Asp	Glu	туг	Tyr	Asp 110	Lys	His
Phe	Thr	Glu 115	Phe	Val	Pro	Leu	Arg 120	Thr	Lys	Ala	Lys	Glu 125	Ile	Leu	Gln
Glu	Glu 130	Glu	Asp	Leu	Ala	Glu 135	Ile	Val	Gln	Leu	Val 140	Gly	Lys	Ala	Ser
Leu 145	Ala	Glu	Thr	Asp	Lys 150	Ile	Thr	Leu	Glu	Val 155	Ala	Lys	Leu	Ile	Lys 160
Asp	Asp	Phe	Leu	Gln 165	Gln	Asn	Gly	Tyr	Thr 170	Pro	Tyr	Asp	Arg	Phe 175	Cys
Pro	Phe	Tyr	Lys 180	Thr	Val	Gly	Met	Leu 185	Ser	Asn	Met	Ile	Ala 190	Phe	Tyr
Asp	Met	Ala 195	Arg	Arg	Val	Phe	Glu 200	Thr	Thr	Ala	Gln	Ser 205	Asp	Asn	Lys
Ile	Thr 210	Trp	Ser	Ile	Ile	Arg 215	Glu	His	Met	Gly	Asp 220	Ile	Leu	Tyr	Lys
Leu 225	Ser	Ser	Met	Lys	Phe 230	Lys	Asp	Pro	Leu	Lys 235	Asp	Gly	Glu	Ala	Lys 240
Ile	Lys	Ser	Asp	Tyr 245	Ala	Gln	Leu	Leu	Glu 250	Asp	Met	Gln	Asn	Ala 255	Phe
Arg	Ser	Leu	Glu 260	Asp											

<210> 902 <211> 169 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (33) <223> Xaa equals any of the naturally occurring L-amino acids Phe Pro Gly Arg Pro Thr Arg Pro Arg Gly Ile Ser Val Ser Gly Gly 10 Glu Ala Val Cys Pro Val Gln Trp Arg Leu Arg Lys Leu Ala Ala Ala 25 Xaa Gly Lys Gly Gln Glu Val Glu Thr Ser Val Thr Tyr Tyr Arg Leu Glu Glu Val Ala Lys Arg Asn Ser Leu Lys Glu Leu Trp Leu Val Ile His Gly Arg Val Tyr Asp Val Thr Arg Phe Leu Asn Glu His Pro Gly Gly Glu Glu Val Leu Leu Glu Gln Ala Gly Val Asp Ala Ser Glu Ser 90 Phe Glu Asp Val Gly His Ser Ser Asp Ala Arg Glu Met Leu Lys Gln Tyr Tyr Ile Gly Asp Ile His Pro Ser Asp Leu Lys Pro Glu Ser Gly 120 Ser Lys Asp Pro Ser Lys Asn Asp Thr Cys Lys Ser Cys Trp Ala Tyr

Trp Ile Leu Pro Ile Ile Gly Ala Val Leu Leu Gly Phe Leu Tyr Arg

155

Tyr Tyr Thr Ser Glu Ser Lys Ser Ser 165

150

<210> 903

145

<211> 53

<212> PRT

<213> Homo sapiens

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<220>
 <221> SITE
 <222> (15)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (19)
 <223> Xaa equals any of the naturally occurring L-amino acids
 Pro Leu Cys Leu Ala Lys Asn Lys Asn Phe Leu Ile Leu Arg Xaa Asn
                  5
                                      10
 Ile Gln Xaa Ile His Ile Lys Ser Leu Glu Asn Ile Ile Pro Phe Asp
                                  25
Ser Leu Ile Thr Leu Leu Glu Tyr Lys Glu Met Ile Leu Asn Ile Tyr
Val Val Leu Trp Ser
     50
<210> 904
<211> 329
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 904
Arg Arg Xaa Ala Xaa Pro Arg Val Arg Trp Lys Ile Cys Gly Leu Ser
 1
                  5
                                     10
Pro Thr Thr Leu Ala Ile Tyr Phe Glu Val Val Asn Gln His Asn
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			20)				25	,				30)	
Ala	Pro	35		Glr	n Gly	Gly	Arg		' Ala	lle	Gln	Phe 45		Thr	Gln
Туг	Glr 50		s Ser	: Ser	: Gly	Gln 55	-	Arg	Ile	Arg	Val 60	Thr	Thr	Ile	Ala
Arg 65		Trp	Ala	Asp	70		Thr	Gln	Ile	Gln 75	Asn	Ile	Ala	Ala	ser 80
Phe	Asp	Gln	Glu	Ala 85		Ala	Ile	Leu	Met 90		Arg	Leu	Ala	Ile 95	Tyr
Arg	Ala	Glu	Thr 100		Glu	Gly	Pro	Asp 105		Leu	Arg	Trp	Leu 110	Asp	Arg
Gln	Leu	Ile 115	_	Leu	Cys	Gln	Lys 120	Phe	Gly	Glu	Tyr	His 125	Lys	Asp	Asp
Pro	Ser 130	Ser	Phe	Arg	Phe	Ser 135	Glu	Thr	Phe	Ser	Leu 140	Tyr	Pro	Gln	Phe
Met 145		His	Leu	Arg	Arg 150	Ser	Ser	Phe	Leu	Gln 155	Val	Phe	Asn	Asn	Ser 160
Pro	Asp	Glu	Ser	Ser 165	Tyr	Tyr	Arg	His	His 170	Phe	Met	Arg	Gln	Asp 175	Leu
Thr	Gln	Ser	Leu 180	Ile	Met	Ile	Gln	Pro 185	Ile	Leu	Tyr	Ala	Tyr 190	Ser	Phe
Ser	Gly	Pro 195	Pro	Glu	Pro	Val	Leu 200	Leu	Asp	Ser	Ser	Ser 205	Ile	Leu	Ala
Asp	Arg 210	Ile	Leu	Leu	Met	Asp 215	Thr	Phe	Phe	Gln	Ile 220	Leu	Ile	Tyr	His
Gly 225	Glu	Thr	Ile	Ala	Gln 230	Trp	Arg	Lys	Ser	Gly 235	Tyr	Gln	Asp	Met	Pro 240
Glu	Tyr	Glu	Asn	Phe 245		His	Leu		Gln 250		Pro	Val	Asp	Asp 255	Ala
Gln	Glu	Ile	Leu 260	His	Ser	Arg	Phe	Pro 265	Met	Pro	Arg	Tyr	Ile 270	Asp	Thr
Glu	His	Gly 275	Gly	Ser	Gln	Ala	Arg 280	Phe	Leu	Leu		Lys 285	Val	Asn	Pro
Ser	Gln	Thr	His	Asn	Asn	Met	Tyr	Ala	Trp	Gly	Gln	G1u	Ser	Gly	Ala

290 300 295 Pro Ile Leu Thr Asp Asp Val Ser Leu Gln Val Phe Met Asp His Leu 305 310 315 Lys Lys Leu Ala Val Ser Ser Ala Ala 325 <210> 905 <211> 264 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (48) <223> Xaa equals any of the naturally occurring L-amino acids <400> 905 Phe Leu Leu Pro Thr Leu Trp Phe Cys Ser Pro Ser Ala Lys Tyr Phe Phe Lys Met Ala Phe Tyr Asn Gly Trp Ile Leu Phe Leu Ala Val Leu Ala Ile Pro Val Cys Ala Val Arg Gly Arg Asn Val Glu Asn Met Xaa Ile Leu Arg Leu Met Leu Leu His Ile Lys Tyr Leu Tyr Gly Ile Arg Val Glu Val Arg Gly Ala His His Phe Pro Pro Ser Gln Pro Tyr Val 70 Val Val Ser Asn His Gln Ser Ser Leu Asp Leu Leu Gly Met Met Glu Val Leu Pro Gly Arg Cys Val Pro Ile Ala Lys Arg Glu Leu Leu Trp 100 105 Ala Gly Ser Ala Gly Leu Ala Cys Trp Leu Ala Gly Val Ile Phe Ile 120 Asp Arg Lys Arg Thr Gly Asp Ala Ile Ser Val Met Ser Glu Val Ala 130 135 Gln Thr Leu Leu Thr Gln Asp Val Arg Val Trp Val Phe Pro Glu Gly

145

150

854

Thr Arg Asn His Asn Gly Ser Met Leu Pro Phe Lys Arg Gly Ala Phe 165 170 175

His Leu Ala Val Gln Ala Gln Val Pro Ile Val Pro Ile Val Met Ser 180 185 190

Ser Tyr Gln Asp Phe Tyr Cys Lys Lys Glu Arg Arg Phe Thr Ser Gly 195 200 205

Gln Cys Gln Val Arg Val Leu Pro Pro Val Pro Thr Glu Gly Leu Thr 210 215 220

Pro Asp Asp Val Pro Ala Leu Ala Asp Arg Val Arg His Ser Met Leu 225 230 235 240

Thr Val Phe Arg Glu Ile Ser Thr Asp Gly Arg Gly Gly Gly Asp Tyr
245 250 255

Leu Lys Lys Pro Gly Gly Gly Gly 260

<210> 906

<211> 189

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 906

Xaa Xaa Pro Xaa Pro Glu Phe Pro Gly Arg Thr His Ala Ser Gly Leu 1 5 10 15

Leu Arg Ser Arg Leu Ala Leu Arg Trp Leu Ser His Val Arg Arg Pro
20 25 30

Ser Arg Arg Val Pro Arg Met Pro Arg Gly Ser Arg Ser Arg Thr Ser

35 40 45 Arg Met Ala Pro Pro Ala Ser Arg Ala Pro Gln Met Arg Ala Ala Pro Arg Pro Ala Pro Val Ala Gln Pro Pro Ala Ala Ala Pro Pro Ser Ala Val Gly Ser Ser Ala Ala Ala Pro Arg Gln Pro Gly Leu Met Ala Gln 90 Met Ala Thr Thr Ala Ala Gly Val Ala Val Gly Ser Ala Val Gly His 100 105 Thr Leu Gly His Ala Ile Thr Gly Gly Phe Ser Gly Gly Ser Asn Ala 120 Glu Pro Ala Arg Pro Asp Ile Thr Tyr Gln Glu Pro Gln Gly Thr Gln 135 Pro Ala Gln Gln Gln Pro Cys Leu Tyr Glu Ile Lys Gln Phe Leu Glu Cys Ala Gln Asn Gln Gly Asp Ile Lys Leu Cys Glu Gly Phe Asn 170 Glu Val Leu Lys Gln Cys Arg Leu Ala Asn Gly Leu Ala 180 <210> 907 <211> 638

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<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids
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856

<22 <22 <22 <22	21> 5 22> 6 23> 2 20>	(73) Kaa e SITE		.s ar	ny of	the	e nat	ural	.ly 6	occur	cring	j L−a	minc	aci	.ds
		(427) Kaa €		s ar	y of	the	nat	ural	ly o	occur	ring	L-a	mino	aci	.ds
			Gly	туг 5		Leu	Ser	Gln	Ala 10	_	val	. Asp	Ala	Phe	Arg
Gln	Leu	Ser	Ala 20		Pro	Ala	Asp	Pro 25		Leu	Phe	His	Val 30	Ala	Arg
Trp	Phe	Arg		Ile	Glu	Ala	Leu 40		Gly	⁄ Xaa	Pro	Cys 45	Gly	Lys	Gly
Gln	Pro 50		Xaa	Leu	Pro	Ser 55	Xaa	Gln	Arg	Pro	Ala 60	Cys	Ala	Ala	Pro
Val 65		Pro	Ser	Cys	Trp 70	-	Pro	Xaa	Cys	Arg 75		His	Leu	Tyr	Asn 80
Ser	Leu	Thr	Arg	Asn 85	Lys	Glu	Val	Phe	Ile 90	Pro	Gln	Asp	Gly	Lys 95	Lys
Val	Thr	Trp	Tyr 100	Cys	Cys	Gly	Pro	Thr 105	Val	Tyr	Asp	Ala	Ser 110	His	Met
Gly	His	Ala 115	Arg	Ser	Tyr	Ile	Ser 120	Phe	Asp	Ile	Leu	Arg 125	Arg	Val	Leu
Lys	Asp 130	Tyr	Phe	Lys	Phe	Asp 135	Val	Phe	Tyr	Cys	Met 140	Asn	Ile	Thr	Asp
Ile 145	Asp	Asp	Lys	Ile	Ile 150	Lys	Arg	Ala	Arg	Gln 155	Asn	His	Leu	Phe	Glu 160
Gln	Tyr	Arg	Glu	Lys 165	Arg	Pro	Glu	Ala	Ala 170	Gln	Leu	Leu	Glu	Asp 175	Val
Gln	Ala	Ala	Leu 180	Lys	Pro	Phe	Ser	Val 185	Lys	Leu	Asn	Glu	Thr 190	Thr	Asp
Pro	Asp	Lys 195	Lys	Gln	Met	Leu	Glu 200	Arg	Ile	Gln	His	Ala 205	Val	Gln	Leu

Ala Thr Glu Pro Leu Glu Lys Ala Val Gln Ser Arg Leu Thr Gly Glu

	210)				215	•				220)			
G10 225		L Asr	s Ser	Cys	230		ı Val	Leu	ı Let	2 Glu 235		Ala	a Lys	. Asp	240
Leu	sei	Asp	Trp	245	_	Ser	Thr	Leu	Gly 250	Cys	. Asp	Val	l Thr	255	
Ser	: Ile	Ph∈	Ser 260	_	Leu	Pro	. Lys	Phe 265	_	Glu	Gly	' Asp	270		Arq
Asp	Met	275		Leu	. Asn	Val	Leu 280		Pro	Asp	Val	Leu 285		Arg	val
Ser	Glu 290		Val	. Pro	Glu	Ile 295		. Asn	Phe	val	Gln 300		Ile	· Val	Asp
Asn 305	-	Tyr	Gly	Туг	Val 310		Asn	Gly	Ser	7 Val	_	Phe	Asp	Thr	Ala 320
Lys	Phe	Ala	. Ser	Ser 325		Lys	His	Ser	Туг 330	Gly	Lys	Leu	Val	Pro 335	Glu
Ala	Val	Gly	Asp 340		Lys	Ala	Leu	Gln 345		Gly	Glu	Gly	Asp 350	Leu	Ser
Ile	Ser	Ala 355	_	Arg	Leu	Ser	Glu 360	Lys	Arg	Ser	Pro	Asn 365	-	Phe	Ala
Leu	Trp 370	Lys	Ala	Ser	Lys	Pro 375	Gly	Glu	Pro	Ser	Trp 380	Pro	Cys	Pro	Trp
Gly 385	Lys	Gly	Arg	Pro	Gly 390	Trp	His	Ile	Glu	Cys 395	Ser	Ala	Met	Ala	Gly 400
Thr	Leu	Leu	Gly	Ala 405	Ser	Met	Asp	Ile	His 410	Gly	Gly	Gly	Phe	Asp 415	Leu
Arg	Phe	Pro	His 420	His	Asp	Asn	Glu	Leu 425	Ala	Xaa	Ser	Glu	Ala 430	Tyr	Phe
Glu	Asn	Asp 435	Сув	Trp	Val	Arg	Tyr 440	Phe	Leu	His	Thr	Gly 445	His	Leu	Thr
Ile	Ala 450	Gly	Cys	Lys	Met	Ser 455	Lys	ser	Leu	Lys	Asn 460	Phe	Ile	Thr	Ile
465					470					Gln 475					480
Leu	Met	His	Ser	Trp	Lys	Asp	Thr	Leu	Asp	Tyr	Ser	Ser	Asn	Thr	Met

858

485 490 Glu Ser Ala Leu Gln Tyr Glu Lys Phe Leu Asn Glu Phe Phe Leu Asn 505 Val Lys Asp Ile Leu Arg Ala Pro Val Asp Ile Thr Gly Gln Phe Glu Lys Trp Gly Glu Glu Glu Ala Glu Leu Asn Lys Asn Phe Tyr Asp Lys 535 Lys Thr Ala Ile His Lys Ala Leu Cys Asp Asn Val Asp Thr Arg Thr 550 555 Val Met Glu Glu Met Arg Ala Leu Val Ser Gln Cys Asn Leu Tyr Met 565 570 Ala Ala Arg Lys Ala Val Arg Lys Arg Pro Asn Gln Ala Leu Leu Glu Asn Ile Ala Leu Tyr Leu Thr His Met Leu Lys Ile Phe Gly Ala Val Glu Glu Asp Ser Ser Leu Gly Phe Pro Val Gly Gly Pro Gly Thr Ser Leu Ser Leu Glu Ala Thr Val Met Pro Tyr Leu Gln Val Leu 630 <210> 908 <211> 248 <212> PRT <213> Homo sapiens <400> 908 Ser His Pro Leu Arg Ser Arg Leu Pro Ser Ala Thr Gly Val Gly His Ala Leu Ala Arg Ser Phe Cys Arg His Leu Gly Ser Ala Phe Pro Ala Gln Asn Ala Arg Arg Ser Thr Glu Thr Val Pro Ala Thr Glu Gln Glu 40

Leu Pro Gln Pro Gln Ala Glu Thr Gly Ser Gly Thr Glu Ser Asp Ser

Asp Glu Ser Val Pro Glu Leu Glu Glu Gln Asp Ser Thr Gln Ala Thr

75

Thr Gln Gln Ala Gln Leu Ala Ala Ala Ala Glu Ile Asp Glu Glu Pro 85 90 95

Val Ser Lys Ala Lys Gln Ser Arg Ser Glu Lys Lys Ala Arg Lys Ala 100 105 110

Met Ser Lys Leu Gly Leu Arg Gln Val Thr Gly Val Thr Arg Val Thr 115 120 125

Ile Arg Lys Ser Lys Asn Ile Leu Phe Val Ile Thr Lys Pro Asp Val 130 135 140

Tyr Lys Ser Pro Ala Ser Asp Thr Tyr Ile Val Phe Gly Glu Ala Lys 145 150 150 160

Ile Glu Asp Leu Ser Gln Gln Ala Gln Leu Ala Ala Ala Glu Lys Phe 165 170 175

Lys Val Gln Gly Glu Ala Val Ser Asn Ile Gln Glu Asn Thr Gln Thr 180 185 190

Pro Thr Val Glu Glu Glu Ser Glu Glu Glu Glu Val Asp Glu Thr Gly
195 200 205

Val Glu Val Lys Asp Ile Glu Leu Val Met Ser Gln Ala Asn Val Ser 210 215 220

Arg Ala Lys Ala Val Arg Ala Leu Lys Asn Asn Ser Asn Asp Ile Val 225 230 235 240

Asn Ala Ile Met Glu Leu Thr Met 245

<210> 909

<211> 161

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (46)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (158)

<223> Xaa equals any of the naturally occurring L-amino acids

860

<400> 909 Gln Gly Cys Cys Tyr Gly Ala Gly Arg Arg Val Ala Arg Leu Leu Ala Pro Leu Met Trp Arg Arg Ala Val Ser Ser Val Ala Gly Ser Ala Val Gly Ala Glu Pro Gly Leu Arg Leu Leu Ala Val Gln Arg Xaa Pro Val Glu Gln Arg Ser Ala Gly Leu Ala Arg Pro Gln Thr Leu Ser Ala Ala 55 Cys Thr Ala Lys Pro Gly Leu Glu Glu Arg Ala Glu Gly Thr Val Asn Glu Gly Arg Pro Glu Ser Asp Ala Ala Asp His Thr Gly Pro Lys Phe Asp Ile Asp Met Met Val Ser Leu Leu Arg Gln Glu Asn Ala Arg Asp Ile Cys Val Ile Gln Val Pro Pro Glu Met Arg Tyr Thr Asp Tyr Phe 120 Val Ile Val Ser Gly Thr Ser Thr Arg His Leu His Ala Met Ala Phe 135 Tyr Val Val Lys Met Tyr Lys His Leu Lys Cys Lys Arg Xaa Pro Ser 145 Cys

<210> 910

<211> 487

<212> PRT

<213> Homo sapiens

<400> 910

Lys Ala Ala Ser Gly Pro Ala Thr Ser Ile Thr Gly Val Thr Met Gly
1 5 10 15

Ala Val Leu Gly Val Phe Ser Leu Ala Ser Trp Val Pro Cys Leu Cys 20 25 30

Ser Gly Ala Ser Cys Leu Leu Cys Ser Cys Cys Pro Asn Ser Lys Asn 35 40 45

Ser Thr Val Thr Arg Leu Ile Tyr Ala Phe Ile Leu Leu Leu Ser Thr Val Val Ser Tyr Ile Met Gln Arg Lys Glu Met Glu Thr Tyr Leu Lys Lys Ile Pro Gly Phe Cys Glu Gly Gly Phe Lys Ile His Glu Ala Asp Ile Asn Ala Asp Lys Asp Cys Asp Val Leu Val Gly Tyr Lys Ala Val 105 Tyr Arg Ile Ser Phe Ala Met Ala Ile Phe Phe Phe Val Phe Ser Leu 120 125 Leu Met Phe Lys Val Lys Thr Ser Lys Asp Leu Arg Ala Ala Val His 135 Asn Gly Phe Trp Phe Phe Lys Ile Ala Ala Leu Ile Gly Ile Met Val Gly Ser Phe Tyr Ile Pro Gly Gly Tyr Phe Ser Ser Val Trp Phe Val Val Gly Met Ile Gly Ala Ala Leu Phe Ile Leu Ile Gln Leu Val Leu 185 Leu Val Asp Phe Ala His Ser Trp Asn Glu Ser Trp Val Asn Arg Met 200 Glu Glu Gly Asn Pro Arg Leu Trp Tyr Ala Ala Leu Leu Ser Phe Thr Ser Ala Phe Tyr Ile Leu Ser Ile Ile Cys Val Gly Leu Leu Tyr Thr 225 230 235 Tyr Tyr Thr Lys Pro Asp Gly Cys Thr Glu Asn Lys Phe Phe Ile Ser Ile Asn Leu Ile Leu Cys Val Val Ala Ser Ile Ile Ser Ile His Pro 265 Lys Ile Gln Glu His Gln Pro Arg Ser Gly Leu Leu Gln Ser Ser Leu 280

Ile Thr Leu Tyr Thr Met Tyr Leu Thr Trp Ser Ala Met Ser Asn Glu

Pro Asp Arg Ser Cys Asn Pro Asn Leu Met Ser Phe Ile Thr Arg Ile

315

862

Thr Ala Pro Thr Leu Ala Pro Gly Asn Ser Thr Ala Val Val Pro Thr 330 Pro Thr Pro Pro Ser Lys Ser Gly Ser Leu Leu Asp Ser Asp Asn Phe 345 Ile Gly Leu Phe Val Phe Val Leu Cys Leu Leu Tyr Ser Ser Ile Arq Thr Ser Thr Asn Ser Gln Val Asp Lys Leu Thr Leu Ser Gly Ser Asp 375 Ser Val Ile Leu Gly Asp Thr Thr Thr Ser Gly Ala Ser Asp Glu Glu 390 395 Asp Gly Gln Pro Arg Arg Ala Val Asp Asn Glu Lys Glu Gly Val Gln 410 Tyr Ser Tyr Ser Leu Phe His Leu Met Leu Cys Leu Ala Ser Leu Tyr 425 Ile Met Met Thr Leu Thr Ser Trp Tyr Ser Pro Asp Ala Lys Phe Gln 440 Ser Met Thr Ser Lys Trp Pro Ala Val Trp Val Lys Ile Ser Ser Ser 455 Trp Val Cys Leu Leu Leu Tyr Val Trp Thr Leu Val Ala Pro Leu Val Leu Thr Ser Arg Asp Phe Ser 485

<210> 911 <211> 98 <212> PRT <213> Homo sapiens

1215 HOMO Sapiens

<220> <221> SITE <222> (69)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 911

Asp Pro Arg Val Arg His Arg Gly Asn Lys Val Val Lys Lys Val 1 5 10 15

Leu Val Arg Cys Arg His Phe Ile Cys Pro His Ser Leu Arg Leu Ser 20 25 30

PCT/US00/05882

Gln Ser Phe Gln Gln Arg Tyr Val Gly Pro Glu His Pro Glu Phe Thr

Thr Ser Val Val Arg Arg Ala Thr Met Arg Arg Ala Leu Gly Arg Ile 50 55 60

Cys His Phe Gln Xaa Val Arg Gly Thr Ala Ser Leu Gly Glu Gly Ala 65 70 75 80

Leu Gly Cys Asp Ser Arg Thr Cys Lys Ala Ala Ser Gly Leu Trp Arg 85 90 95

Gly Arg

WO 00/55350

<210> 912

<211> 206

<212> PRT

<213> Homo sapiens

<400> 912

Phe Ser Leu Phe Pro Leu Ala Lys Ser Phe Asp Asp Gly Asp Tyr Phe 1 5 10 15

Pro Val Trp Gly Thr Cys Leu Gly Phe Glu Glu Leu Ser Leu Leu Ile 20 25 30

Ser Gly Glu Cys Leu Leu Thr Ala Thr Asp Thr Val Asp Val Ala Met 35 40 45

Pro Leu Asn Phe Thr Gly Gly Gln Leu His Ser Arg Met Phe Gln Asn 50 60

Phe Pro Thr Glu Leu Leu Ser Leu Ala Val Glu Pro Leu Thr Ala 65 70 75 80

Asn Phe His Lys Trp Ser Leu Ser Val Lys Asn Phe Thr Met Asn Glu 85 90 95

Lys Leu Lys Lys Phe Phe Asn Val Leu Thr Thr Asn Thr Asp Gly Lys
100 105 110

Ile Glu Phe Ile Ser Thr Met Glu Gly Tyr Lys Tyr Pro Val Tyr Gly
115 120 125

Val Gln Trp His Pro Glu Lys Ala Pro Tyr Glu Trp Lys Asn Leu Asp 130 135 140

Gly Ile Ser His Ala Pro Asn Ala Val Lys Thr Ala Phe Tyr Leu Ala 145 150 155 160

Glu Phe Phe Val Asn Glu Ala Arg Lys Asn Asn His His Phe Lys Ser 165 170 175

Glu Ser Glu Glu Lys Ala Leu Ile Tyr Gln Phe Ser Pro Ile Tyr 180 185 190

Thr Gly Asn Ile Ser Ser Phe Gln Gln Cys Tyr Ile Phe Asp 195 200 205

<210> 913

<211> 91

<212> PRT

<213> Homo sapiens

<400> 913

Phe Ser Gly Pro Cys Pro Val Asn Thr Leu Gly Trp Glu Val Ser Ser 1 5 10 15

Phe Ser Pro Leu Leu Ser Ser Cys Leu Asn Met Val Arg Thr Lys Ala 20 25 30

Asp Ser Val Pro Gly Thr Tyr Arg Lys Val Val Ala Ala Arg Ala Pro 35 40 45

Arg Lys Val Leu Gly Ser Ser Thr Ser Ala Thr Asn Ser Thr Ser Val 50 60

Ser Ser Arg Lys Glu His Val Leu Cys Asn Leu Ile Thr Gln Met Met 65 70 75 80

Lys Lys Asn Arg Thr Phe Ser Phe Ile Phe Glu

<210> 914

<211> 178

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (132)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (147)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (154)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 914

Arg Glu Leu Ser Thr Arg Gln Arg Ser Gln Ala Lys Pro Pro Ala Ser 1 5 10 15

Met Ala Ser Glu Phe Lys Lys Leu Phe Trp Arg Ala Val Val Ala 20 25 30

Glu Phe Leu Ala Thr Thr Leu Phe Val Phe Ile Ser Ile Gly Ser Ala 35 40 45

Leu Gly Phe Lys Tyr Pro Val Gly Asn Asn Gln Thr Ala Val Gln Asp 50 55 60

Asn Val Lys Val Ser Leu Ala Phe Gly Leu Ser Ile Ala Thr Leu Ala 65 70 75 80

Gln Ser Val Gly His Ile Ser Gly Ala His Leu Asn Pro Ala Val Thr $85 \hspace{1cm} 90 \hspace{1cm} 95$

Leu Gly Leu Leu Leu Ser Cys Gln Ile Ser Ile Phe Arg Ala Leu Met 100 105 110

Tyr Ile Ile Ala Gln Cys Val Gly Ala Ile Val Ala Thr Ala Ile Leu 115 120 125

Ser Gly Ile Xaa Ser Ser Leu Thr Gly Asn Ser Leu Gly Arg Asn Asp 130 135 140

Leu Ala Xaa Gly Val Asn Phe Gly Pro Xaa Pro Gly His Arg Asp His 145 150 150 160

Arg Asp Pro Pro Ala Gly Ala Met Arg Ala Gly Tyr Tyr Arg Pro Glu 165 170 175

Ala Pro

<210> 915

<211> 377

<212> PRT

866

<213> Homo sapiens

<220>

<221> SITE

<222> (355)

<223> Xaa equals any of the naturally occurring L-amino acids

<100> 915

Val Cys Ala His Gly Gln Gly Leu Leu Arg Tyr Phe Tyr Ser Arg Arg 1 5 10 15

Ile Asp Ile Thr Leu Ser Ser Val Lys Cys Phe His Lys Leu Ala Ser 20 25 30

Ala Tyr Gly Ala Arg Gln Leu Gln Gly Tyr Cys Ala Ser Leu Phe Ala 35 40 45

Ile Leu Leu Pro Gln Asp Pro Ser Phe Gln Met Pro Leu Asp Leu Tyr 50 55 60

Ala Tyr Ala Val Ala Thr Gly Asp Ala Leu Leu Glu Lys Leu Cys Leu 65 70 75 80

Gln Phe Leu Ala Trp Asn Phe Glu Ala Leu Thr Gln Ala Glu Ala Trp 85 90 95

Pro Ser Val Pro Thr Asp Leu Leu Gln Leu Leu Leu Pro Arg Ser Asp 100 105 110

Leu Ala Val Pro Ser Glu Leu Ala Leu Leu Lys Ala Val Asp Thr Trp 115 120 125

Ser Trp Gly Glu Arg Ala Ser His Glu Glu Val Glu Gly Leu Val Glu 130 135 140

Lys Ile Arg Phe Pro Met Met Leu Pro Glu Glu Leu Phe Glu Leu Gln 145 150 155 160

Phe Asn Leu Ser Leu Tyr Trp Ser His Glu Ala Leu Phe Gln Lys Lys 165 170 175

Thr Leu Gln Ala Leu Glu Phe His Thr Val Pro Phe Gln Leu Leu Ala 180 185 190

Arg Tyr Lys Gly Leu Asn Leu Thr Glu Asp Thr Tyr Lys Pro Arg Ile 195 200 205

Tyr Thr Ser Pro Thr Trp Ser Ala Phe Val Thr Asp Ser Ser Trp Ser 210 215 220

Ala Arg Lys Ser Gln Leu Val Tyr Gln Ser Arg Arg Gly Pro Leu Val

867

230 235 . 225 240 Lys Tyr Ser Ser Asp Tyr Phe Gln Ala Pro Ser Asp Tyr Arg Tyr Tyr 250 Pro Tyr Gln Ser Phe Gln Thr Pro Gln His Pro Ser Phe Leu Phe Gln 265 Asp Lys Arg Val Ser Trp Ser Leu Val Tyr Leu Pro Thr Ile Gln Ser 280 Cys Trp Asn Tyr Gly Phe Ser Cys Ser Ser Asp Glu Leu Pro Val Leu 295 Gly Leu Thr Lys Ser Gly Gly Ser Asp Arg Thr Ile Ala Tyr Glu Asn 310 Lys Ala Leu Met Leu Cys Glu Gly Leu Phe Val Ala Asp Val Thr Asp 330 Phe Glu Gly Trp Lys Ala Ala Ile Pro Ser Ala Leu Asp Thr Asn Ser 340 345 Ser Lys Xaa Thr Ser Ser Phe Pro Cys Pro Ala Gly Thr Ser Thr Ala 360 Ser Ala Arg Ser Ser Ala Pro Ser Thr 370 375 <210> 916 <211> 100 <212> PRT <213> Homo sapiens <400> 916 Arg Val Gln Arg Asp Thr Cys Leu Pro Pro Met Ser Leu Ser Phe His 10 Leu Pro Ser Arg Arg Met Lys Asn Pro Ser Ile Val Gly Val Leu Cys Thr Asp Ser Gln Gly Leu Asn Leu Gly Cys Arg Gly Thr Leu Ser Asp 40 Glu His Ala Gly Val Ile Ser Val Leu Ala Gln Gln Ala Ala Lys Leu

Thr Ser Asp Pro Thr Asp Ile Pro Val Val Cys Leu Glu Ser Asp Asn

75

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Gly Asn Ile Met Ile Gln Lys His Asp Gly Ile Thr Val Ala Val His
                 85
                                     90
Lys Met Ala Ser
            100
<210> 917
<211> 245
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (172)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (240)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (242)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 917
Leu Pro Pro Arg Ser Val Gly Gly Leu Gln Lys Met Arg Arg Lys Leu
                                     10
Gly Leu Val Glu Val Glu Leu Glu Glu Asp Gly Ala Leu Val Ser Lys
             20
                                 25
```

869

Leu Leu Glu Thr Met His Leu Thr Gly Ala Asp Xaa Thr Asn Thr Phe 35 40 45

Tyr Leu Leu Ser Ser Phe Pro Val Glu Leu Glu Ser Pro Gly Leu Xaa 50 55 60

Glu Phe Leu Ala Arg Leu Met Glu Gln Cys Ala Ser Leu Glu Glu Leu 65 70 75 80

Arg Leu Ala Phe Arg Pro Xaa Met Asp Pro Arg Gln Leu Ser Met Met 85 90 95

Leu Met Leu Ala Gln Ser Asn Pro Gln Leu Phe Ala Leu Met Gly Thr
100 105 110

Arg Ala Gly Ile Ala Arg Glu Leu Glu Arg Val Glu Gln Gln Ser Arg 115 120 125

Leu Glu Gln Leu Ser Ala Ala Glu Leu Gln Ser Arg Asn Gln Gly His 130 135 140

Trp Ala Asp Trp Leu Gln Ala Tyr Arg Ala Arg Leu Asp Lys Asp Leu 145 150 155 160

Glu Gly Ala Gly Asp Ala Ala Ala Trp Gln Ala Xaa Ala Arg Ala Arg 165 170 175

Asp Ala Arg Gln Gln Pro Glu Val Arg Ala Glu Glu Leu His Ser Arg 180 185 190

Arg Met Pro Phe Glu Val Ala Glu Arg Gly Asp Phe Ser Glu Val Arg

Arg Val Leu Lys Leu Phe Glu Thr Leu Tyr His Cys Glu Ala Gly Ala 210 215 220

Ala Thr Arg Arg Pro Arg Pro Arg Glu Ala Asp Gly Gly Gly Arg Xaa 225 230 235 240

Gly Xaa Phe Leu Thr

<210> 918

<211> 44

<212> PRT

<213> Homo sapiens

<400> 918

Asn Ser Ala Arg Arg Ile Ser Leu Lys Glu Gly Glu Gly Lys Thr Asp

870

10 Phe Leu Cys Gly Thr Lys Thr Lys Pro Ser Val Ser Leu Cys Glu Gln Arg Cys Lys Lys Glu Glu Thr Gln Phe Thr His Gly <210> 919 <211> 160 <212> PRT <213> Homo sapiens <400> 919 Phe Gly Thr Arg Val Thr Ser Gly Gly Ser Arg Asp Ala Val Pro Gly Ala Glu Pro Pro Lys Met Ala Val Cys Ile Ala Val Ile Ala Lys Glu Asn Tyr Pro Leu Tyr Ile Arg Ser Thr Pro Thr Glu Asn Glu Leu Lys Phe His Tyr Met Val His Thr Ser Leu Asp Val Val Asp Glu Lys Ile Ser Ala Met Gly Lys Ala Leu Val Asp Gln Arg Glu Leu Tyr Leu Gly Leu Leu Tyr Pro Thr Glu Asp Tyr Lys Val Tyr Gly Tyr Val Thr Asn 90 Ser Lys Val Lys Phe Val Met Val Val Asp Ser Ser Asn Thr Ala Leu Arg Asp Asn Glu Ile Arg Ser Met Phe Arg Lys Leu His Asn Ser Tyr Thr Asp Val Met Cys Asn Pro Phe Tyr Asn Pro Gly Asp Arg Ile Gln

Ser Arg Ala Phe Asp Asn Met Val Thr Ser Met Met Ile Gln Val Cys

871

<210> 920

<211> 40

<212> PRT

<213> Homo sapiens

<400> 920

Leu Ala Phe Phe Leu Thr Ser Glu Gly Glu Lys Lys Val Ala Thr Tyr

1 5 10 15

Met Phe Glu Lys Pro Leu Lys Ser Thr Gln Ser Lys Asp Phe Met Leu 20 25 30

Gln Phe Gly His Met Leu Arg Val 35 40

<210> 921

<211> 372

<212> PRT

<213> Homo sapiens

<400> 921

Leu Leu Gly Pro Ala Gly Gln Arg Ser His Ala Ala Pro Met Arg Pro 1 5 10 15

Leu Pro Pro Val Gly Asp Val Arg Leu Glu Leu Ser Pro Pro Pro Pro 20 25 30

Leu Leu Pro Val Pro Val Val Ser Gly Ser Pro Val Gly Ser Ser Gly 35 40 45

Arg Leu Met Ala Ser Ser Ser Leu Val Pro Asp Arg Leu Arg Leu 50 55 60

Pro Leu Cys Phe Leu Gly Val Phe Val Cys Tyr Phe Tyr Tyr Gly Ile 65 70 75 80

Leu Gln Glu Lys Ile Thr Arg Gly Lys Tyr Gly Glu Gly Ala Lys Gln 85 90 95

Glu Thr Phe Thr Phe Ala Leu Thr Leu Val Phe Ile Gln Cys Val Ile 100 105 110

Asn Ala Val Phe Ala Lys Ile Leu Ile Gln Phe Phe Asp Thr Ala Arg

Val Asp Arg Thr Arg Ser Trp Leu Tyr Ala Ala Cys Ser Ile Ser Tyr 130 135 140

Leu Gly Ala Met Val Ser Ser Asn Ser Ala Leu Gln Phe Val Asn Tyr

· 145					150					155					160
Pro	Thr	Gln	Val	Leu 165	-	Lys	Ser	Cys	Lys 170		Ile	Pro	Val	Met 175	
Leu	Gly	Val	Thr 180	Leu	Leu	Lys	Lys	Lys 185		Pro	Leu	Ala	Lys 190	-	Leu
Cys	Val	Leu 195		Ile	Val	Ala	Gly 200		Ala	Leu	Phe	Met 205	Tyr	Lys	Pro
Lys	Lys 210	Val	Val	Gly	Ile	Glu 215	Glu	His	Thr	Val	Gly 220	Tyr	Gly	Gl u	Leu
Leu 225	Leu	Leu	Leu	Ser	Leu 230	Thr	Leu	Asp	Gly	Leu 235	Thr	Gly	Val	Ser	Gln 240
Asp	His	Met	Arg	Ala 245	His	Tyr	Gln	Thr	Gly 250	Ser	Asn	His	Met	Met 255	Leu
Asn	Ile	Asn	Leu 260	Trp	Ser	Thr	Leu	Leu 265	Leu	Gly	Met	Gly	Ile 270	Leu	Phe
Thr	Gly	Glu 275	Leu	Trp	Glu	Phe	Leu 280	Ser	Phe	Ala	Glu	Arg 285	Tyr	Pro	Ala
Ile	Ile 290	Tyr	Asn	Ile	Leu	Leu 295	Phe	Gly	Leu	Thr	Ser 300	Ala	Leu	Gly	Gln
Ser 305	Phe	Ile	Phe	Met	Thr 310	Val	Val	Tyr	Phe	Gly 315	Pro	Leu	Thr	Суз	Ser 320
Ile	Ile	Thr	Thr	Thr 325	Arg	Lys	Phe	Phe	Thr 330	Ile	Leu	Ala	Ser	Val 335	Ile
Leu	Phe	Ala	Asn 340	Pro	Ile	Ser	Pro	Met 345	Gln	Trp	Val	Gly	Thr 350	Val	Leu
Val	Phe	Leu 355	Gly	Leu	Gly	Leu	Asp 360	Ala	Lys	Phe	Gly	Lys 365	Gly	Ala	Lys
Lys	Thr 370	Ser	His												

<210> 922

<211> 363

<212> PRT

<213> Homo sapiens

<400> 922

Pro Ala Arg Thr Met Phe Tyr Ala His Phe Val Leu Ser Lys Arg Gly
1 5 10 15

Pro Leu Ala Lys Ile Trp Leu Ala Ala His Trp Asp Lys Lys Leu Thr
20 25 30

Lys Ala His Val Phe Glu Cys Asn Leu Glu Ser Ser Val Glu Ser Ile 35 40 45

Ile Ser Pro Lys Val Lys Met Ala Leu Arg Thr Ser Gly His Leu Leu 50 55 60

Leu Gly Val Val Arg Ile Tyr His Arg Lys Ala Lys Tyr Leu Leu Ala 65 70 75 80

Asp Cys Asn Glu Ala Phe Ile Lys Ile Lys Met Ala Phe Arg Pro Gly 85 90 95

Val Val Asp Leu Pro Glu Glu Asn Arg Glu Ala Ala Tyr Asn Ala Ile 100 105 110

Thr Leu Pro Glu Glu Phe His Asp Phe Asp Gln Pro Leu Pro Asp Leu 115 120 125

Asp Asp Ile Asp Val Ala Gln Gln Phe Ser Leu Asn Gln Ser Arg Val 130 135 140

Glu Glu Ile Thr Met Arg Glu Glu Val Gly Asn Ile Ser Ile Leu Gln 145 150 155 160

Glu Asn Asp Phe Gly Asp Phe Gly Met Asp Asp Arg Glu Ile Met Arg 165 170 175

Glu Gly Ser Ala Phe Glu Asp Asp Asp Met Leu Val Ser Thr Thr Thr 180 185 190

Ser Asn Leu Leu Leu Glu Ser Glu Gln Ser Thr Ser Asn Leu Asn Glu 195 200 205

Lys Ile Asn His Leu Glu Tyr Glu Asp Gln Tyr Lys Asp Asp Asn Phe 210 215 220

Gly Glu Gly Asn Asp Gly Gly Ile Leu Asp Asp Lys Leu Ile Ser Asn 225 230 235 240

Asn Asp Gly Gly Ile Phe Asp Asp Pro Pro Ala Leu Ser Glu Ala Gly 245 250 255

Val Met Leu Pro Glu Gln Pro Ala His Asp Asp Met Asp Glu Asp Asp 260 265 270

Asn Val Ser Met Gly Gly Pro Asp Ser Pro Asp Ser Val Asp Pro Val 275 280 285

Glu Pro Met Pro Thr Met Thr Asp Gln Thr Thr Leu Val Pro Asn Glu 290 295 300

Glu Glu Ala Phe Ala Leu Glu Pro Ile Asp Ile Thr Val Lys Glu Thr 305 310 315 320

Lys Ala Lys Arg Lys Arg Lys Leu Ile Val Asp Ser Val Lys Glu Leu 325 330 335

Asp Ser Lys Thr Ile Arg Ala Gln Leu Ser Asp Tyr Ser Asp Ile Val 340 345 350

Thr Thr Leu Asp Leu Ala Pro Pro Pro Arg Asn 355 360

<210> 923

<211> 296

<212> PRT

<213> Homo sapiens

<400> 923

Val Ala Val Ile Trp Ala Tyr Trp Leu Gly Leu Lys Val Arg Arg Glu
1 5 10 15

Tyr Arg Lys Phe Phe Arg Ala Asn Ala Gly Lys Lys Ile Tyr Glu Phe 20 25 30

Thr Leu Gln Arg Ile Val Gln Lys Tyr Phe Leu Glu Met Lys Asn Lys 35 40 45

Met Pro Ser Leu Ser Pro Ile Asp Lys Asn Trp Pro Ser Arg Pro Tyr 50 55 60

Leu Phe Leu Asp Ser Thr His Lys Glu Leu Lys Arg Ile Phe His Leu 65 70 75 80

Trp Arg Cys Lys Lys Tyr Arg Asp Gln Phe Thr Asp Gln Gln Lys Leu 85 90 95

Ile Tyr Glu Glu Lys Leu Glu Ala Ser Glu Leu Phe Lys Asp Lys Lys 100 105 110

Ala Leu Tyr Pro Ser Ser Val Gly Gln Pro Phe Gln Gly Ala Tyr Leu 115 120 125

Glu Ile Asn Lys Asn Pro Lys Tyr Lys Lys Leu Lys Asp Ala Ile Glu Glu Lys Ile Ile Ile Ala Glu Val Val Asn Lys Ile Asn Arg Ala Asn 150 Gly Lys Ser Thr Ser Arg Ile Phe Leu Leu Thr Asn Asn Asn Leu Leu 165 170 Leu Ala Asp Gln Lys Ser Gly Gln Ile Lys Ser Glu Val Pro Leu Val 185 Asp Val Thr Lys Val Ser Met Ser Ser Gln Asn Asp Gly Phe Phe Ala 200 Val His Leu Lys Glu Gly Ser Glu Ala Ala Ser Lys Gly Asp Phe Leu 215 Phe Ser Ser Asp His Leu Ile Glu Met Ala Thr Lys Leu Tyr Arg Thr Thr Leu Ser Gln Thr Lys Gln Lys Leu Asn Ile Glu Ile Ser Asp Glu Phe Leu Val Gln Phe Arg Gln Asp Lys Val Cys Val Lys Phe Ile Gln Gly Asn Gln Lys Asn Gly Ser Val Pro Thr Cys Lys Arg Lys Asn Asn 280 Arg Leu Leu Glu Val Ala Val Pro 290

<210> 924

<211> 91

<212> PRT

<213> Homo sapiens

<400> 924

His Phe Ser Ile Asn Tyr Asn Gln Lys Ser Asp Leu Leu Lys Glu Lys

1 5 10 15

Ser Asp Cys Lys Ser Phe Gln Gly Gln Thr Ala Thr Glu Pro Pro Thr
20 25 30

Pro Lys Gln Glu Thr Leu Val Lys Val Gln Glu Ala Arg Arg Phe Ser 35 40 45

Pro Thr Lys Val Gln Leu Gly Asn Asp Ala Glu Arg Met Thr Thr Thr

50 55 60

Cys Asn Ser Arg Lys Met Leu Ala Ser Arg Val Arg Val Thr Ser Glu 65 70 75 80

Cys His Lys Ser Ser Leu Ser His Cys Leu Ile 85 90

<210> 925

<211> 159

<212> PRT

<213> Homo sapiens

<400> 925

Asn Ser Ala Arg Ala Gly Gly Arg Ala Val Leu Ser Gly Glu Pro Glu
1 5 10 15

Ala Asn Met Asp Gln Glu Thr Val Gly Asn Val Val Leu Leu Ala Ile 20 25 30

Val Thr Leu Ile Ser Val Val Gln Asn Gly Phe Phe Ala His Lys Val 35 40 45

Glu His Glu Ser Arg Thr Gln Asn Gly Arg Ser Phe Gln Arg Thr Gly
50 55 60

Thr Leu Ala Phe Glu Arg Val Tyr Thr Ala Asn Gln Asn Cys Val Asp 65 70 75 80

Ala Tyr Pro Thr Phe Leu Ala Val Leu Trp Ser Ala Gly Leu Leu Cys 85 90 95

Ser Gln Val Pro Ala Ala Phe Ala Gly Leu Met Tyr Leu Phe Val Arg

Gln Lys Tyr Phe Val Gly Tyr Leu Gly Glu Arg Thr Gln Ser Thr Pro \$115\$ \$120\$ \$125\$

Gly Tyr Ile Phe Gly Glu Thr His His Thr Leu Pro Val Pro His Val 130 135 140

Arg Cys Trp His Ile Gln Leu Leu Pro His Leu Leu Phe Arg Lys 145 150 155

<210> 926

<211> 303

<212> PRT

<213> Homo sapiens

<400> 926

Gly Ser Leu Ala Ser Pro Pro Ser Leu Gly Ser Met Gly Glu Lys Ser 1 5 10 15

Glu Asn Cys Gly Val Pro Glu Asp Leu Leu Asn Gly Leu Lys Val Thr
20 25 30

Asp Thr Gln Glu Ala Glu Cys Ala Gly Pro Pro Val Pro Asp Pro Lys 35 40 45

Asn Gln His Ser Gln Ser Lys Leu Leu Arg Asp Asp Glu Ala His Leu 50 55 60

Gln Glu Asp Gln Gly Glu Glu Cys Phe His Asp Cys Ser Ala Ser 65 70 75 80

Phe Glu Glu Glu Pro Gly Ala Asp Lys Val Glu Asn Lys Ser Asn Glu 85 90 95

Asp Val Asn Ser Ser Glu Leu Asp Glu Glu Tyr Leu Ile Glu Leu Glu 100 105 110

Lys Asn Met Ser Asp Glu Glu Lys Gln Lys Arg Arg Glu Glu Ser Thr 115 120 125

Arg Leu Lys Glu Glu Gly Asn Glu Gln Phe Lys Lys Gly Asp Tyr Ile 130 135 140

Glu Ala Glu Ser Ser Tyr Ser Arg Ala Leu Glu Met Cys Pro Ser Cys 145 150 155 160

Phe Gln Lys Glu Arg Ser Ile Leu Phe Ser Asn Arg Ala Ala Ala Arg 165 170 175

Met Lys Gln Asp Lys Lys Glu Met Ala Ile Asn Asp Cys Ser Lys Ala 180 185 190

Ile Gln Leu Asn Pro Ser Tyr Ile Arg Ala Ile Leu Arg Arg Ala Glu 195 200 205

Leu Tyr Glu Lys Thr Asp Lys Leu Asp Glu Ala Leu Glu Asp Tyr Lys 210 215 220

Ser Ile Leu Glu Lys Asp Pro Ser Ile His Gln Ala Arg Glu Ala Cys 225 230 235 240

Met Arg Leu Pro Lys Gln Ile Glu Glu Arg Asn Glu Arg Leu Lys Glu 245 250 255

Glu Met Leu Gly Lys Leu Lys Asp Leu Gly Asn Leu Val Leu Arg Pro 260 265 270

Phe Gly Leu Ser Thr Glu Asn Phe Gln Ile Lys Gln Asp Ser Ser Thr 275 280 285

Gly Ser Tyr Ser Ile Asn Phe Val Gln Asn Pro Asn Asn Asn Arg 290 295 300

<210> 927

<211> 329

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 927

Xaa Gly Gly Cys Cys Ser Gly Pro Gly His Ser Lys Arg Arg Gln
1 5 10 15

Ala Pro Gly Val Gly Ala Val Gly Gly Gly Ser Pro Glu Arg Glu Glu 20 25 30

Val Gly Ala Gly Tyr Asn Ser Glu Asp Glu Tyr Glu Ala Ala Ala Ala 35 40 45

Arg Ile Glu Ala Met Asp Pro Ala Thr Val Glu Gln Gln Glu His Trp 50 55 60

Phe Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Ile Lys Gln Met 65 70 75 80

Lys Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr 85 90 95

Gly Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr 100 105 110

Leu Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe 115 120 125

Thr Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His 130 135 140

Ile Glu Met Gln Ala Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val 145 150 155 160

Tyr Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln 170 Asn Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr 185 Asn Ser Val Val Asn Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly 200 Leu Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn 215 Ala Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu Asp Lys Lys Arg Ala Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu 245 250 Glu Gln Val Ala Arg Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu 265 Lys Gln Ala Arg Gln Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser 275 280 Ala Thr Cys Ser Ser Ala Thr Ala Ala Ala Ser Ser Gly Leu Glu Glu 295 300 Trp Thr Ser Arg Ser Pro Arg Gln Glu Phe Gln Pro Arg His Leu Ser 310 315 Thr Leu Ser Cys Met Leu Asn Trp Ala 325

<210> 928
<211> 436
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (210)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (217)
<223> Xaa equals any of the naturally occurring L-amino acids

	1> s	ITE 262)													
		,	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<40	0> 9	28													
Lys 1	Arg	Phe	Leu	Arg 5		Phe	Lys	Leu	Leu 10		Lys	Arg	Glu	Phe 15	
Lys	Glu	Asn	Gln 20		His	Tyr	His	11e 25		Gln	Lys	Phe	Leu 30	Ile	Let
Gly	Asp	Ile 35	Asp	Gly	Leu	Met	Asp 40		Phe	Ser	Lys	Trp 45	Leu	Ser	Lys
Ser	Arg 50	Asn	Asn	Leu	Pro	Gly 55	His	Leu	Leu	Arg	Phe 60	Met	Thr	His	Lev
Ile 65	Leu	Phe	Phe	Arg	Thr 70	Leu	Gly	Leu	Gln	Thr 75	Lys	Glu	Glu	Val	Ser 80
Ile	Glu	Val	Leu	Lys 85	Thr	Tyr	Ile	Gln	Leu 90	Leu	Ile	Arg	Glu	Lys 95	His
Thr	Asn	Leu	Ile 100	Ala	Phe	туr	Thr	Cys 105	His	Leu	Pro	Gln	Asp 110	Leu	Ala
Val	Ala	Gln 115	туг	Ala	Leu	Phe	Leu 120	Glu	Ser	Val	Thr	Glu 125	Phe	Glu	Gln
Arg	His 130	His	Cys	Leu	Glu	Leu 135	Ala	Lys	Glu	Ala	Asp 140	Leu	Asp	Val	Ala
Thr 145	Ile	Thr	Lys	Thr	Val 150	Val	Glu	Asn	Ile	Arg 155	Lys	Lys	Asp	Asn	Gly 160
Glu	Phe	Ser	His	His 165	Asp	Leu	Ala	Pro	Ala 170	Leu	Asp	Thr	Gly	Thr 175	Thr
Glu	Glu	Asp	Arg 180	Leu	Lys	Ile	Asp	Val 185	Ile	Asp	Trp	Leu	Val 190	Phe	Asp
Pro	Ala	Gln 195	Arg	Ala	Glu	Ala	Leu 200	Lys	Gln	Gly	Asn	Ala 205	Ile	Met	Arg
Lys	Xaa 210	Leu	Ala	Ser	Lys	Lys 215	His	Xaa	Ala	Ala	Lys 220	Glu	Val	Phe	Val
Lys 225	Ile	Pro	Gln	Asp	Ser 230	Ile	Ala	Glu	Ile	Tyr 235	Asn	Gln	Cys	Glu	Glu 240

Gln Gly Met Glu Ser Pro Leu Pro Ala Glu Asp Asp Asn Ala Ile Arg 245 250 255

Glu His Leu Cys Ile Xaa Ala Tyr Leu Glu Ala His Glu Thr Phe Asn 260 265 270

Glu Trp Phe Lys His Met Asn Ser Val Pro Gln Lys Pro Ala Leu Ile 275 280 285

Pro Gln Pro Thr Phe Thr Glu Lys Val Ala His Glu His Lys Glu Lys 290 295 300

Lys Tyr Glu Met Asp Phe Gly Ile Trp Lys Gly His Leu Asp Ala Leu 305 310 315 320

Thr Ala Asp Val Lys Glu Lys Met Tyr Asn Val Leu Leu Phe Val Asp 325 330 335

Gly Gly Trp Met Val Asp Val Arg Glu Asp Ala Lys Glu Asp His Glu 340 345 350

Arg Thr His Gln Met Val Leu Leu Arg Lys Leu Cys Leu Pro Met Leu 355 360 365

Cys Phe Leu Leu His Thr Ile Leu His Ser Thr Gly Gln Tyr Gln Glu 370 375 380

Cys Leu Gln Leu Ala Asp Met Val Ser Ser Glu Arg His Lys Leu Tyr 385 390 395 400

Leu Val Phe Ser Lys Glu Glu Leu Arg Lys Leu Leu Gln Lys Leu Arg 405 410 415

Glu Ser Ser Leu Met Leu Leu Asp Gln Gly Leu Asp Pro Leu Gly Tyr
420 425 430

Glu Ile Gln Leu 435

<210> 929

<211> 161

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (159)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 929

Asp Ala Asp Val Gln Phe Leu Ala Ser Val Leu Pro Pro Asp Thr Asp 1 5 10 15

Pro Ala Phe Phe Glu His Leu Arg Ala Leu Asp Cys Ser Glu Val Thr 20 25 30

Val Arg Ala Leu Pro Glu Gly Ser Leu Ala Phe Pro Gly Val Pro Leu
35 40 45

Leu Gln Val Ser Gly Pro Leu Leu Val Val Gln Leu Leu Glu Thr Pro 50 55 60

Leu Leu Cys Leu Val Ser Tyr Ala Ser Leu Val Ala Thr Asn Ala Ala 65 70 75 80

Arg Leu Arg Leu Ile Ala Gly Pro Glu Lys Arg Leu Leu Glu Met Gly 85 90 95

Leu Arg Arg Ala Gln Gly Pro Asp Gly Gly Leu Thr Ala Ser Thr Tyr
100 105 110

Ser Tyr Leu Gly Gly Phe Asp Ser Ser Ser Asn Val Leu Ala Gly Gln 115 120 125

Leu Arg Gly Val Pro Val Ala Gly Thr Leu Ala His Ser Phe Val Thr
130 135 140

Ser Phe Ser Gly Ser Glu Val Pro Leu Thr Arg Cys Trp Gly Xaa Ser 145 150 155 160

Leu

<210> 930

<211> 741

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (19)

<223> Xaa equals any of the naturally occurring L-amino acids

<22															
<22	1> 5	SITE													
<22	2> ((282))												
<22	3> }	iaa e	•qua]	Ls ar	ny of	the	nat	ural	ly c	occur	ring	∫ L-a	mino	aci	.ds
<40	0> 9	30													
Leu 1		. Lys	; Ile	Glu 5		Asn	Xaa	Asp	His		: Gly	Phe	His	Phe 15	Thr
Thr	Gly	' Xaa	Pro 20		Pro	Ser	Thr	Glu 25		Glu	. Leu	Asp	Val		Leu
Pro	Thr	Ala 35		Ser	Leu	Pro	Ile 40		Arg	i Tàs	Ser	Ala 45		Val	Ile
Pro	Glu 50		: Glu	Gly	Ile	Lys 55		Glu	Ala	Lys	Ala 60		Asp	Asp	Met
Phe 65	Glu	Ser	Ser	Thr	Leu 70	Ser	Asp	Gly	Gln	Ala 75		Ala	Asp	Gln	Ser 80
Glu	Ile	Ile	Pro	Thr 85		G1y	Gln	Phe	Glu 90	_	Thr	Gln	Glu	Glu 95	Tyr
Glu	Asp	Lys	Lys 100		Ala	Gly	Pro	Ser 105	Phe	Gln	Pro	Glu	Phe 110	Ser	Ser
Gly	Ala	Glu 115		Ala	Leu	Val	Asp 120		Thr	Pro	Tyr	Leu 125	Ser	Ile	Ala
Thr	Thr 130		Leu	Met	Asp	Gln 135	Ser	Val	Thr	Glu	Val 140	Pro	Asp	Val	Met
Glu 145	Gly	Ser	Asn	Pro	Pro 150	Tyr	Tyr	Thr	Asp	Thr 155	Thr	Leu	Ala	Val	Ser 160
Phr	Phe	Ala	Lys	Leu 165	Ser	Ser	Gln	Thr	Pro 170	Ser	Ser	Pro	Leu	Thr 175	Ile
ryr	Ser	Gly	Ser 180	Glu	Ala	Ser	Gly	His 185	Thr	Glu	Ile	Pro	Gln 190	Pro	Ser
Ala	Leu	Pro 195	Gly	Ile	Asp	Val	Gly 200	ser	Ser	Val	Met	Ser 205	Pro	Gln	Asp
Ser	Phe 210	Lys	Glu	Ile	His	Val 215	Asn	Ile	Glu	Ala	Thr 220	Phe	Lys	Pro	Ser
er	Glu	Glu	Tyr		His		Thr	Glu		Pro	Ser	Leu	Ser	Pro	Asp

Thi	: Lys	s Lei	ı Glu	245		Glu	ı Asp	Asp	250		Pro	Glu	Leu	Leu 255	
Glu	ı Met	: Glu	260		Pro	Thr	Glu	Leu 265		Ala	Val	Glu	Gly 270		Glu
Ile	Leu	275		Phe	Gln	Asn	Lys 280		. Xaa	Gly	Gln	Val 285		Gly	Glu
Ala	11e 290	-	Met	. Phe	Pro	Thr 295	lle	Lys	Thr	Pro	Glu 300		Gly	Thr	Val
Ile 305		Thr	Ala	Asp	Glu 310		Glu	Leu	Glu	Gly 315		Thr	Gln	Trp	Pro 320
His	Ser	Thr	Ser	Ala 325		Ala	Thr	Tyr	Gly 330		Glu	Ala	G1y	Val 335	Val
Pro	Trp	Leu	Ser 340		Gln	Thr	Ser	Glu 345		Pro	Thr	Leu	Ser 350	Ser	Ser
Pro	Glu	1le 355		Pro	Glu	Thr	Gln 360		Ala	Leu	Ile	Arg 365	Gly	Gln	Asp
Ser	Thr 370		Ala	Ala	Ser	Glu 375	Gln	Gln	Val	Ala	Ala 380	Arg	Ile	Leu	Asp
Ser 385	Asn	Asp	Gln	Ala	Thr 390	Val	Asn	Pro	Val	Glu 395	Phe	Asn	Thr	Glu	Val 400
Ala	Thr	Pro	Pro	Phe 405	Ser	Leu	Leu	Glu	Thr 410	Ser	Asn	Glu	Thr	Asp 415	Phe
Leu	Ile	Gly	Ile 420	Asn	Glu	Glu	Ser	Val 425	Glu	Gly	Thr	Ala	Ile 430	Tyr	Leu
Pro	Gly	Pro 435	Asp	Arg	Cys	Lys	Met 440	Asn	Pro	Cys	Leu	Asn 445	Gly	Gly	Thr
Cys	Tyr 450	Pro	Thr	Glu	Thr	Ser 455	Tyr	Val	Cys	Thr	Cys 460	Val	Pro	Gly	Tyr
Ser 465	Gly	Asp	Gln	Сув	Glu 470	Leu	Asp	Phe	Asp	Glu 475	Cys	His	Ser	Asn	Pro 480
Cys	Arg	Asn	Gly	Ala 485	Thr	Суз	Val	Asp	Gly 490	Phe	Asn	Thr	Phe	Arg 495	Cys
Leu	Cys	Leu	Pro 500	Ser	Tyr	Val	Gly	Ala 505	Leu	Cys	Glu	Gln	Asp 510	Thr	Glu

Thr	Cys	Asp	Tyr	Gly	Trp	His	Lys	Phe	Gln	Gly	Gln	Cys	Tyr	Lys	Tyr
		515					520					525			

- Phe Ala His Arg Arg Thr Trp Asp Ala Ala Glu Arg Glu Cys Arg Leu 530 535 540
- Gln Gly Ala His Leu Thr Ser Ile Leu Ser His Glu Glu Gln Met Phe 545 550 560
- Val Asn Arg Val Gly His Asp Tyr Gln Trp Ile Gly Leu Asn Asp Lys 565 570 575
- Met Phe Glu His Asp Phe Arg Trp Thr Asp Gly Ser Thr Leu Gln Tyr 580 585 590
- Glu Asn Trp Arg Pro Asn Gln Pro Asp Ser Phe Phe Ser Ala Gly Glu
 595 600 605
- Asp Cys Val Val Ile Ile Trp His Glu Asn Gly Gln Trp Asn Asp Val 610 615 620
- Pro Cys Asn Tyr His Leu Thr Tyr Thr Cys Lys Lys Gly Thr Val Ala 625 630 635 640
- Cys Gly Gln Pro Pro Val Val Glu Asn Ala Lys Thr Phe Gly Lys Met 645 650 655
- Lys Pro Arg Tyr Glu Ile Asn Ser Leu Ile Arg Tyr His Cys Lys Asp 660 665 670
- Gly Phe Ile Gln Arg His Leu Pro Thr Ile Arg Cys Leu Gly Asn Gly 675 680 685
- Arg Trp Ala Ile Pro Lys Ile Thr Cys Met Asn Pro Ser Ala Tyr Gln 690 695 700
- Arg Thr Tyr Ser Met Lys Tyr Phe Lys Asn Ser Ser Ser Ala Lys Asp 705 710 715 720
- Asn Ser Ile Asn Thr Ser Lys His Asp His Arg Trp Ser Arg Trp 725 730 735

Gln Glu Ser Arg Arg 740

<210> 931

<211> 209

<212> PRT

<213> Homo sapiens

886

<22	0>														
	1> s														
	2> (-													
<22	3> X	aa e	qual	s an	y of	the	nat	ural	ly c	ccur	ring	L-a	mino	aci	ds
- 40	^- ^	2.1													
	0> 9		~1	3.00	C1-	T 0.11	170.1	Dro	7 00		Tou	T	C1	mh ee	×
_	rys	ALA	GIY	_	GIII	ьец	Val	PIO	10		Leu	туя	Glu		Asp
1				5					10					15	
Lvs	Glu	Lvs	Glv	Asn	Va l	Val	Leu	Lvs	Glv	Glu	Xaa	Ser	Ala	Ara	Met
2,5		Ly S	20	11511	• • • •	• • • •	Lou	25	_	014	11.44		30	411.9	
Lys	Ile	Pro	Ser	Asn	Met	Trp	Val	Glu	Ala	Trp	Glu	Thr	Ala	Lvs	Pro
-		35				-	40			•		45			
Ile	Pro	Ala	Arg	Arg	Gln	Arg	Arg	Leu	Phe	Asp	Asp	Thr	Arg	Glu	Ala
	50					55					60				
Glu	Lys	Val	Leu	His	Tyr	Leu	Ala	Ile	Gln	Lys	Pro	Ala	Asp	Leu	Ala
65					70					75					80
Arg	His	Leu	Leu	Pro	Cys	Val	Ile	His	Ala	Ala	Val	Leu	Lys	Val	Lys
				85					90					95	
Glu	Glu	Glu		Leu	Glu	Asn	Ile		Ser	Val	Lys	Lys	Ile	Ile	Lys
			100					105					110		
			_		_		_		_			_		_	
Gln	Ile		Ser	His	Ser	Ser	_	Val	Leu	His	Phe		Asn	Pro	Glu
		115					120					125			
*	T	T	T	a1	01	T7.	*1.	***	a1-	~1	m1	•	1	~ 1	
Asp	130	гÀг	теп	GIU	GLU	135	тте	HIS	GIN	тте	140	Asn	Val	GIU	Ата
	130					133					140				
T.e.ii	Tle	Δla	Ara	Δla	Ara	Ser	T.e.11	T.ve	Δla	T.170	Dhe	G1v	Thr	Glu	T.tre
145			**** 9	2124	150	501	Deu	27.5		155	- 110	GIY	1111	GIU	160
.45					130					133					100
Cvs	Glu	Gln	Glu	Glu	Glu	Lvs	Glu	Asp	Leu	Glu	Ara	Phe	Val	Ser	Cvs
1-				165		-,, -			170		9			175	-1-
Leu	Leu	Glu	Gln	Pro	Glu	Val	Leu	Val	Thr	Gly	Ala	Gly	Arg	Gly	Hiş
			180					185		_		-	190	-	

Ala Gly Arg Ile Ile His Lys Leu Phe Val Asn Ala Gln Arg Cys Gln 195 200 205

Leu

PCT/US00/05882 WO 00/55350

887

<210> 932

<211> 57

<212> PRT

<213> Homo sapiens

<400> 932

Leu Leu Glu Val Pro Glu Met Gly Leu Thr Phe Ile Lys Gln Ile Ala 10

Tyr Tyr Asp Leu Ala Ala Ala Thr Val Gln Leu His Ile Asn Ser Thr 25

Asp Gln Thr Ile Cys Ile Trp His His Leu Leu Thr His Asp Met Arg

Leu Phe Cys Ile Asn Cys Tyr Asp Gly 50

<210> 933

<211> 125

<212> PRT

<213> Homo sapiens

<400> 933

Ile Lys Glu Glu Ser Asp Tyr His Asp Leu Glu Ser Val Val Gln Gln 10

Val Glu Gln Asn Leu Glu Leu Met Thr Lys Arg Ala Val Lys Ala Glu 25

Asn His Val Val Lys Leu Lys Gln Glu Ile Ser Leu Leu Gln Ala Gln

Val Ser Asn Phe Gln Arg Glu Asn Glu Ala Leu Arg Cys Gly Gln Gly 55

Ala Ser Leu Thr Val Val Lys Gln Asn Ala Asp Val Ala Leu Gln Asn

Leu Arg Val Val Met Asn Ser Ala Gln Ala Ser Ile Lys Gln Leu Val 90

Ser Gly Ala Glu Thr Leu Asn Leu Val Ala Glu Ile Leu Lys Ser Ile

Asp Arg Ile Ser Glu Val Lys Asp Glu Glu Glu Asp Ser 120

888

<210> 934

<211> 306

<212> PRT

<213> Homo sapiens

<400> 934

Pro Thr Phe Ser Arg Ala Val Ala Thr Met Phe Ser Arg Ala Gly Val

Ala Gly Leu Ser Ala Trp Thr Leu Gln Pro Gln Trp Ile Gln Val Arg
20 25 30

Asn Met Ala Thr Leu Lys Asp Ile Thr Arg Arg Leu Lys Ser Ile Lys

Asn Ile Gln Lys Ile Thr Lys Ser Met Lys Met Val Ala Ala Ala Lys 50 55 60

Tyr Ala Arg Ala Glu Arg Glu Leu Lys Pro Ala Arg Ile Tyr Gly Leu 65 70 75 80

Gly Ser Leu Ala Leu Tyr Glu Lys Ala Asp Ile Lys Gly Pro Glu Asp 85 90 95

Lys Lys Lys His Leu Leu Ile Gly Val Ser Ser Asp Arg Gly Leu Cys 100 105 110

Gly Ala Ile His Ser Ser Ile Ala Lys Gln Met Lys Ser Glu Val Ala 115 120 125

Thr Leu Thr Ala Ala Gly Lys Glu Val Met Leu Val Gly Ile Gly Asp 130 135 140

Lys Ile Arg Gly Ile Leu Tyr Arg Thr His Ser Asp Gln Phe Leu Val 145 150 155 160

Ala Phe Lys Glu Val Gly Arg Lys Pro Pro Thr Phe Gly Asp Ala Ser 165 170 175

Val Ile Ala Leu Glu Leu Leu Asn Ser Gly Tyr Glu Phe Asp Glu Gly
180 185 190

Ser Ile Ile Phe Asn Lys Phe Arg Ser Val Ile Ser Tyr Lys Thr Glu 195 200 205

Glu Lys Pro Ile Phe Ser Leu Asn Thr Val Ala Ser Ala Asp Ser Met 210 215 220

Ser Ile Tyr Asp Asp Ile Asp Ala Asp Val Leu Gln Asn Tyr Gln Glu 225 230 235 240

889

Tyr Asn Leu Ala Asn Ile Ile Tyr Tyr Ser Leu Lys Glu Ser Thr Thr 245 250 255

Ser Glu Gln Ser Ala Arg Met Thr Ala Met Asp Asn Ala Ser Lys Asn 260 265 270

Ala Ser Glu Met Ile Asp Lys Leu Thr Leu Thr Phe Asn Arg Thr Arg 275 280 285

Gln Ala Val Ile Thr Lys Glu Leu Ile Glu Ile Ile Ser Gly Ala Ala 290 295 300

Ala Leu 305

<210> 935

<211> 135

<212> PRT

<213> Homo sapiens

<400> 935

Gly Ala Leu Cys Ala Ala Ser Val Pro Arg Cys Val Trp Ser Ser Ala $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Gly Val Val Ala Leu Phe Glu Glu His Cys Ala Pro Leu Val Trp Val 20 25 30

Tyr Thr Tyr Glu Cys Cys His Tyr Met Cys Ser Ala Leu Leu Ser Leu 35 40 45

Ser Cys Pro Cys Pro Ala Pro Ser Glu Arg Ala Ala Gly Leu Cys Cys 50 60

Arg Leu Val Val Pro Cys His Lys Gly Met Pro Arg Leu Thr Asp Leu 65 70 75 80

Ser Val Lys Thr Lys Asp Val Trp Glu Ile Pro Arg Glu Ser Leu Gln 85 90 95

Leu Ile Lys Arg Leu Gly Asn Gly Gln Phe Gly Glu Val Trp Met Gly
100 105 110

Met Leu Arg Leu Asn Tyr Ser Leu Ile Ser Phe Pro Val Trp Lys Ile 115 120 125

Pro Asn Thr Lys Asp Gly Arg 130 135

<210> 936

<211> 284

<212> PRT

<213> Homo sapiens

<400> 936

Leu Ser Gly Thr Thr Tyr Ala Arg Ala Cys Arg Ser Gln Cys Ala Ser 1 5 10 15

Ala Ala Gly Gly Cys Thr Gly Gly Ala Gly Gly Gly Gly Gly Gly 20 25 30

Gly Gly Trp Gly Gly Ala Gly Gly Lys Cys Cys Asp Ala Val Pro Gly 35 40 45

Arg Gly Arg Arg Val Glu Ala Glu Tyr Gln Phe Pro Ser Gly Lys Ala 50 55 60

Ala Met Ala Ile Phe Ser Val Tyr Val Val Asn Lys Ala Gly Gly Leu 65 70 75 80

Ile Tyr Gln Leu Asp Ser Tyr Ala Pro Arg Ala Glu Ala Glu Lys Thr 85 90 95

Phe Ser Tyr Pro Leu Asp Leu Leu Leu Lys Leu His Asp Glu Arg Val

Leu Val Ala Phe Gly Gln Arg Asp Gly Ile Arg Val Gly His Ala Val 115 120 125

Leu Ala Ile Asn Gly Met Asp Val Asn Gly Arg Tyr Thr Ala Asp Gly 130 135 140

Lys Glu Val Leu Glu Tyr Leu Gly Asn Pro Ala Asn Tyr Pro Val Ser 145 150 155 160

Ile Arg Phe Gly Arg Pro Arg Leu Thr Ser Asn Glu Lys Leu Met Leu 165 170 175

Ala Ser Met Phe His Ser Leu Phe Ala Ile Gly Ser Gln Leu Ser Pro 180 185 190

Glu Gln Gly Ser Ser Gly Ile Glu Met Leu Glu Thr Asp Thr Phe Lys 195 200 205

Leu His Cys Tyr Gln Thr Leu Thr Gly Ile Lys Phe Val Val Leu Ala 210 215 220

Asp Pro Arg Gln Ala Gly Ile Asp Ser Leu Leu Arg Lys Ile Tyr Glu

891

225 230 235 240

Ile Tyr Ser Asp Phe Ala Leu Lys Asn Pro Phe Tyr Ser Leu Glu Met 245 250 255

Pro Ile Arg Cys Glu Leu Phe Asp Gln Asn Leu Lys Leu Ala Leu Glu 260 265 270

Val Ala Glu Lys Ala Gly Thr Phe Gly Pro Gly Ser 275 280

<210> 937

<211> 338

<212> PRT

<213> Homo sapiens

<400> 937

Pro Val Ser Pro Leu His Arg Glu Glu Gly Asp Lys Trp Gly Glu Val
1 5 10 15

Trp Cys Gln Met Gly Trp Arg Arg Lys Arg Val Pro Gln Arg Gly Arg
20 25 30

Lys Ala Pro Pro Pro Gln Leu His Gly Asn Ile Asn Asn Leu Tyr Phe 35 40 45

Pro Ile Arg Trp Arg Asp Arg Leu His Trp Asp Ser Pro Asn Pro Ala 50 55 60

Ala Glu Cys Gln Arg Pro Arg Ser Thr Leu Val Ser Arg Lys Pro Gly 65 70 75 80

Pro Gly Arg Ile Thr Trp Asp Glu Leu Ala Ala Ser Gly Leu Pro Ser 85 90 95

Cys Asp Ala Ala Val Asn Leu Ala Gly Glu Asn Ile Leu Asn Pro Leu 100 105 110

Arg Arg Trp Asn Glu Thr Phe Gln Lys Glu Val Leu Gly Ser Arg Leu 115 120 125

Glu Thr Thr Gln Leu Leu Ala Lys Ala Ile Thr Lys Ala Pro Gln Pro 130 135 140

Pro Lys Ala Trp Val Leu Val Thr Gly Val Ala Tyr Tyr Gln Pro Ser 145 150 155 160

Leu Thr Ala Glu Tyr Asp Glu Asp Ser Pro Gly Gly Asp Phe Asp Phe 165 170 175

Phe Ser Asn Leu Val Thr Lys Trp Glu Ala Ala Ala Arg Leu Pro Gly 180 185 190

Asp Ser Thr Arg Gln Val Val Val Arg Ser Gly Val Val Leu Gly Arg

Gly Gly Gly Ala Met Gly His Met Leu Leu Pro Phe Arg Leu Gly Leu 210 215 220

Gly Gly Pro Ile Gly Ser Gly His Gln Phe Pro Trp Ile His Ile 225 230 235 240

Gly Asp Leu Ala Gly Ile Leu Thr His Ala Leu Glu Ala Asn His Val 245 250 255

His Gly Val Leu Asn Gly Val Ala Pro Ser Ser Ala Thr Asn Ala Glu
260 265 270

Phe Ala Gln Thr Phe Gly Ala Ala Leu Gly Arg Arg Ala Phe Ile Pro 275 280 285

Leu Pro Ser Ala Val Val Gln Ala Val Phe Gly Arg Gln Arg Ala Ile 290 295 300

Met Leu Leu Glu Gly Gln Lys Val Ile Pro Arg Arg Thr Leu Ala Thr 305 310 315 320

Gly Tyr Gln Tyr Ser Phe Pro Glu Leu Gly Ala Ala Leu Lys Glu Ile 325 330 335

Val Ala

<210> 938

<211> 321

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (164)

<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (268)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 938
Cys Gln Glu Trp Val Pro Asp Arg Glu Ser Tyr Val Ser His Met Lys
                                     10
Lys Ser His Gly Arg Thr Leu Lys Arg Tyr Pro Cys Arg Gln Xaa Glu
Gln Ser Phe His Thr Pro Asn Ser Leu Arg Lys His Ile Arg Asn Asn
                            40
His Asp Thr Val Lys Lys Phe Tyr Thr Cys Gly Tyr Cys Thr Glu Asp
Ser Pro Ser Phe Pro Arg Pro Ser Leu Leu Glu Ser His Ile Ser Leu
                     70
                                         75
Met His Gly Ile Arg Asn Pro Asp Leu Ser Gln Thr Ser Lys Val Lys
Pro Pro Gly Gly His Ser Pro Gln Val Asn His Leu Lys Arg Pro Val
            100
                               105
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894

Ser Gly Val Gly Asp Ala Pro Gly Thr Ser Asn Gly Ala Thr Val Ser 115 120 125

Ser Thr Lys Arg His Lys Ser Leu Phe Gln Cys Ala Lys Cys Ser Phe 130 140

Ala Thr Asp Ser Gly Leu Glu Phe Gln Ser His Ile Pro Gln His Gln 145 150 155 160

Val Gly Gln Xaa His Ser Pro Met Ser Pro Leu Trp Phe Val Leu His 165 170 175

Leu Cys Gln Leu Pro Gln Pro Pro Pro Leu His Cys Pro Gln Gly Glu 180 185 190

Arg Pro Gly Gly Gly Gly Gly Gly Gly Gly Gly Thr Glu Met Ala 195 200 205

Val Glu Val Ala Glu Gln Arg Arg Ala Pro Gly Xaa Xaa Cys Pro Trp 210 215 220

Arg Leu Glu Arg Met Asp Trp Lys Asn Val Pro Val Ser Xaa Cys Gln 225 230 235 240

Leu Thr Gln Arg Arg Gly Asp Cys Trp Ala Arg Pro Leu Arg Thr Met 245 250 255

Val Ala Thr Met Ile Thr Xaa Asn His Arg Xaa Xaa Arg Thr Arg Thr 260 265 270

Ala Thr His Cys Pro Leu Arg Cys Asp Arg Arg Leu Cys Ser Val His 275 280 285

Gly Gln Gly Trp Cys Arg Ser Val Phe His Leu Pro Cys Gly Pro Trp 290 295 300

Lys Ile Lys Gly Ser Ala Pro Ser Val Ser Val Thr Gly Cys Thr Leu 305 310 315 320

Glu

<210> 939

<211> 151

<212> PRT

<213> Homo sapiens

<220>

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<223> Xaa equals any of the naturally occurring L-amino acids
<400> 939
Ala Ala Ser Xaa Gly Glu Gln Arg Glu Arg Ala Arg Leu Gln Thr Pro
Thr Arg Pro His Ser Thr Ser Ala Arg Pro Arg Arg Gln Val Gln
                                 25
Leu Leu Gln Leu Cys Gly Cys Ala Ala Lys Gly Xaa Ala His Gly Leu
Asp Val Thr Ser Pro Thr Val Ser Trp Leu Ala Cys Pro Cys Ala Arg
     50
                         55
Pro Ser Xaa Ser Arg Gln Xaa Leu Gly Thr Ser Glu Glu Glu Pro Gly
Xaa Asn Gly Lys Gly Gly Ile Gly Val His His Ser Leu Leu Leu Trp
                 85
                                     90
Ser Ser Thr Gly Gly Thr Xaa Met Glu Val Ser Cys Leu Thr Ser Leu
            100
                                105
                                                    110
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PCT/US00/05882

896

His Cys Thr Gly Pro Gly Met Pro Ile His Pro Leu Ala Glu Asp Thr 115 120 125

His Gln Val Ile Cys Glu Glu Thr Leu Gly Ser His His Leu Lys Ala 130 135 140

Arg Gly Ser Pro Ser His Arg 145 150

<210> 940

<211> 103

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (103)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 940

Arg Cys Gly Trp Ser Ser Arg Ser Arg Arg Ser Arg Cys Ala Arg Arg 1 5 10 15

Cys Pro Pro Ser Pro Cys Pro Thr Pro Arg His Val Pro Ser Ser Arg

His Pro Glu Val Cys Gly Leu Arg Thr Asn Ser His Arg Cys Leu Phe

Arg Pro Gln Leu Gln Ala Met Pro Ala Ala Gly Gly Val Leu Tyr Gln 50 55 60

Pro Ser Gly Pro Ala Ser Phe Pro Ser Thr Phe Ser Pro Ala Gly Ser

Val Glu Gly Ser Pro Met His Gly Val Tyr Met Ser Gln Pro Val Pro 85 90 . 95

Ala Ala Gly Pro Tyr Pro Xaa 100

<210> 941

<211> 136

<212> PRT

<213> Homo sapiens

<220>

<221> SITE <222> (123) <223> Xaa equals any of the naturally occurring L-amino acids Thr Ala Gly Arg Ser Asp Val Leu Pro Val Ala Gly Gly Glu Val Arg Ala Leu Gln Glu Gly Gly Cys Gly Asp Lys Met Lys Ile Phe Val Gly Asn Val Asp Gly Ala Asp Thr Thr Pro Glu Glu Leu Ala Ala Leu Phe Ala Pro Tyr Gly Thr Val Met Ser Cys Ala Val Met Lys Gln Phe Ala 55 Phe Val His Met Arg Glu Asn Ala Gly Ala Leu Arg Ala Ile Glu Ala 70 Leu His Gly His Glu Leu Arg Pro Gly Arg Ala Leu Val Val Glu Met Ser Arg Pro Arg Pro Leu Asn Thr Trp Lys Ile Phe Val Gly Asn Val 105 Ser Ala Ala Cys Thr Ser Gln Glu Leu Arg Xaa Ser Ser Ser Ala Ala 120 Asp Ala Ser Ser Ser Val Thr Trp 130

<210> 942 <211> 61 <212> PRT <213> Homo sapiens

<400> 942

Ile Met Lys Glu Ser Ser Ser Val Leu Ala Lys Cys Ser Ser Ile Ala 1 5 10 15

Gly Tyr Ile Gln Trp Ser Ser Ile Asn Ser Tyr Leu Ser Gly Leu Asn 20 25 30

Gln Asn Cys Val Ser Leu Asn Ser Tyr His Thr Glu Gly Ala Ser Gln

Ile Thr Ile Phe Leu Ser Ala Val Phe Leu Gln Lys Ser 50 55 60

898

<210> 943 <211> 580 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (52) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (73) <223> Xaa equals any of the naturally occurring L-amino acids <400> 943 Gly Ala Gln Ala Gln Ala Ser Ala Arg Pro Leu Gln Ala Phe Gly Ala 10 Arg Ala Arg Leu Gly Tyr Gly Pro Gly Arg Arg Pro Pro Ser Ala Arg Cys Leu Ser Gly Thr Ala Asn Arg Arg Glu Arg Arg Arg Val Gly Leu Ser Ala Xaa Leu Gly Ala Gly Ala His Ala Arg Ala Pro Pro Gln Ala Gly Ala Met Ala Ser Gly Ser Xaa Ala Glu Cys Leu Gln Glu Thr Thr Cys Pro Val Cys Leu Gln Tyr Phe Ala Glu Pro Met Met Leu Asp Cys Gly His Asn Ile Cys Cys Ala Cys Leu Ala Arg Cys Trp Gly Thr Ala Glu Thr Asn Val Ser Cys Pro Gln Cys Arg Glu Thr Phe Pro Gln Arg His Met Arg Pro Asn Arg His Leu Ala Asn Val Thr Gln Leu 135 Val Lys Gln Leu Arg Thr Glu Arg Pro Ser Gly Pro Gly Glu Met Gly Val Cys Glu Lys His Arg Glu Pro Leu Lys Leu Tyr Cys Glu Glu 170 165

Asp	Gln	Met	Pro 180		Сув	Val	Val	Cys 185		Arg	Ser	Arg	Glu 190		Arg	
Gly	His	Ser 195		Leu	Pro	Leu	Glu 200		Ala	Val	Glu	Gly 205		Lys	Glu	
Gln	Ile 210		Asn	Gln	Leu	Asp 215		Leu	Lys	Ārg	Val 220	Lys	Asp	Leu	Lys	
Lys 225	Arg	Arg	Arg	Ala	Gln 230	_	Glu	Gln	Ala	Arg 235	Ala	Glu	Leu	Leu	Ser 240	
Leu	Thr	Gln	Met	Glu 245	-	Glu	Lys	Ile	Val 250	_	Glu	Phe	Glu	Gln 255	Leu	
Tyr	His	Ser	Leu 260	Lys	Glu	His	Glu	Tyr 265	Arg	Leu	Leu	Ala	Arg 270		Glu	
Glu	Leu	Asp 275	Leu	Ala	Ile	Tyr	Asn 280	Ser	Ile	Asn	Gly	Ala 285	Ile	Thr	Gln	
Phe	Ser 290	Cys	Asn	Ile	Ser	His 295		Ser	Ser	Leu	Ile 300	Ala	Gln	Leu	Glu	
Glu 305	Lys	Gln	Gln	Gln	Pro 310	Thr	Arg	Glu	Leu	Leu 315	Gln	Asp	Ile	Gly	Asp 320	
Thr	Leu	Ser	Arg	Ala 325	Glu	Arg	Ile	Arg	11e 330	Pro	Glu	Pro	Trp	Ile 335	Thr	
Pro	Pro	Asp	Leu 340	Gln	Glu	Lys	Ile	His 345	Ile	Phe	Ala	Gln	Lys 350	Суз	Leu	
Phe	Leu	Thr 355	Glu	Ser	Leu	Lys	Gln 360	Phe	Thr	Glu	Lys	Met 365	Gln	Ser	Asp	
let	Glu 370	Lys	Ile	Gln	Glu	Leu 375	Arg	Glu	Ala	Gln	Leu 380	Tyr	Ser	Val	Asp	
7al 385	Thr	Leu	Asp	Pro	Asp 390	Thr	Ala	Tyr	Pro	Ser 395	Leu	Ile	Leu	Ser	Asp 400	
Asn	Leu	Arg	Gln	Val 405	Arg	Tyr	Ser	Tyr	Leu 410	Gln	Gln	Asp	Leu	Pro 415	Asp	
Asn	Pro	Glu	Arg 420	Phe	Asn	Leu	Phe	Pro 425	Cys	Val	Leu	Gly	Ser 430	Pro	Cys	
he	Ile	Ala 435	Gly	Arg	His		Trp 440	Glu	Val	Glu	Val	Gly 445	Asp	Lys	Ala	

Lys Trp Thr Ile Gly Val Cys Glu Asp Ser Val Cys Arg Lys Gly Gly 455 Val Thr Ser Ala Pro Gln Asn Gly Phe Trp Ala Val Ser Leu Trp Tyr 470 475 Gly Lys Glu Tyr Trp Ala Leu Thr Ser Pro Met Thr Ala Leu Pro Leu 490 Arg Thr Pro Leu Gln Arg Val Gly Ile Phe Leu Asp Tyr Asp Ala Gly Glu Val Ser Phe Tyr Asn Val Thr Glu Arg Cys His Thr Phe Thr Phe 520 Ser His Ala Thr Phe Cys Gly Pro Val Arg Pro Tyr Phe Ser Leu Ser 535 540 Tyr Ser Gly Gly Lys Ser Ala Ala Pro Leu Ile Ile Cys Pro Met Ser 550 555 Gly Ile Asp Gly Phe Ser Gly His Val Gly Asn His Gly His Ser Met Glu Thr Ser Pro <210> 944 <211> 437 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (68) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (166) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (317) <223> Xaa equals any of the naturally occurring L-amino acids <400> 944

Sei		a Th:	r Gly	Sei		/ Glu	ı Lys	Glı	1 Cys	_	v Val	Thr	Ala	Thr	Phe
Asp	Ala	a Se:	r Arg		Thr	: Phe	e Thr	Arç 25		Gly	Ser	Phe	Arg 30		. Thr
Thr	: Alá	Th:		Glr	n Ala	Glu	a Arg		ı Glu	Ile	Met	Lys 45		Met	Gln
Asp	Ala 50		5 Lys	Ala	Glu	Thr 55	-	Lys	Ile	Val	Val	-	Ser	Ser	Val
Ala 65		Gl _y	/ Хаа	Thr	Ala 70		Ser	Pro	Ser	Ser 75		Thr	Ser	Pro	Thr 80
Ser	Asp	Ala	Thr	Thr 85		Leu	Glu	Met	Asn 90		Pro	His	Ala	Ile 95	Pro
Arg	Arg	His	100		Ile	Glu	Gln	Leu 105		Arg	Gln	Gly	Ser 110		Arg
Gly	Phe	Pro		Leu	Ser	Gln	Lys 120		Ser	Pro	Phe	Lys 125	Arg	Gln	Leu
Ser	Leu 130	_	Ile	Asn	Glu	Leu 135	Pro	Ser	Thr	Met	Gln 140	Arg	Lys	Thr	Asp
Phe 145	Pro	Ile	Lys	Asn	Ala 150	Val	Pro	Glu	Val	Glu 155	Gly	Glu	Ala	Glu	Ser 160
Ile	Ser	Ser	Leu	Cys 165	Xaa	Gln	Ile	Thr	Asn 170	Ala	Phe	Ser	Thr	Pro 175	Glu
Asp	Pro	Phe	Ser 180	Ser	Ala	Pro	Met	Thr 185	Lys	Pro	Val	Thr	Val 190	Val	Ala
Pro	Gln	Ser 195	Pro	Thr	Phe	Gln	Gly 200	Thr	Glu	Trp	Gly	Gln 205	Ser	Ser	Gly
Ala	Ala 210	Ser	Pro	Gly	Leu	Phe 215	Gln	Ala	Gly	His	Arg 220	Arg	Thr	Pro	Ser
Glu 225	Ala	Asp	Arg	Trp	Leu 230	Glu	Glu	Val	Ser	Lys 235	Ser	Val	Arg	Ala	Gln 240
Gln	Pro	Gln	Ala	Ser 245	Ala	Ala	Pro	Leu	Gln 250	Pro	Val	Leu	Gln	Pro 255	Pro
Pro	Pro	Thr	Ala 260	Ile	Ser	Gln	Pro	Ala 265	Ser	Pro	Phe	Gln	Gly 270	Asn	Ala

Phe Leu Thr Ser Gln Pro Val Pro Val Gly Val Val Pro Ala Leu Gln 275

Pro Ala Phe Val Pro Ala Gln Ser Tyr Pro Val Ala Asn Gly Met Pro 290 295

Tyr Pro Ala Pro Asn Val Pro Val Val Gly Ile Thr Xaa Ser Gln Met 305 310 315 320

Val Ala Asn Val Phe Gly Thr Ala Gly His Pro Gln Ala Ala His Pro 325 330 335

His Gln Ser Pro Ser Leu Val Arg Gln Gln Thr Phe Pro His Tyr Glu 340 345 350

Ala Ser Ser Ala Thr Thr Ser Pro Phe Phe Lys Pro Pro Ala Gln His 355 360 365

Leu Asn Gly Ser Ala Ala Phe Asn Gly Val Asp Asp Gly Arg Leu Ala 370 375 380

Ser Ala Asp Arg His Thr Glu Val Pro Thr Gly Thr Cys Pro Val Asp 385 390 395 400

Pro Phe Glu Ala Gln Trp Ala Ala Leu Glu Asn Lys Ser Lys Gln Arg 405 410 415

Thr Asn Pro Ser Pro Thr Asn Pro Phe Ser Ser Asp Leu Gln Lys Thr 420 425 430

Phe Glu Ile Glu Leu 435

<210> 945

<211> 160

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (119)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 945

His Gly Ser Met Arg Arg Leu Leu Ile Pro Leu Ala Leu Trp Leu Gly

1 5 10 15

Ala Val Gly Val Gly Val Ala Glu Leu Thr Glu Ala Gln Arg Gly
20 25 30

Leu Gln Val Ala Leu Glu Glu Phe His Lys His Pro Pro Val Gln Trp 40 Ala Phe Gln Glu Thr Ser Val Glu Ser Ala Val Asp Thr Pro Phe Pro 55 Ala Gly Ile Phe Val Arg Leu Glu Phe Lys Leu Gln Gln Thr Ser Cys Arg Lys Arg Asp Trp Lys Lys Pro Glu Cys Lys Val Arg Pro Asn Gly Arg Lys Arg Lys Cys Leu Ala Cys Ile Lys Leu Gly Ser Glu Asp Lys 105 Val Leu Gly Arg Leu Val Xaa Cys Pro Ile Glu Thr Gln Val Leu Arg 115 120 Glu Thr Gln Cys Leu Arg Val Gln Arg Ala Gly Glu Asp Pro His Ser 135 140 Phe Tyr Phe Pro Gly Gln Phe Ala Phe Ser Lys Ala Leu Pro Arg Ser 150 155

<210> 946 <211> 221 <212> PRT <213> Homo sapiens <220>

<221> SITE <222> (198)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 946

Gly Gly Asp Pro Pro Gly Asp Leu Ser Ser Leu Ser Ser Lys Leu Leu 1 5 10 15

Pro Gly Phe Thr Thr Leu Gly Phe Lys Asp Glu Arg Arg Asn Lys Val

Thr Phe Leu Ser Ser Ala Thr Thr Ala Leu Ser Met Gln Asn Asn Ser 35 40 45

Val Phe Gly Asp Leu Lys Ser Asp Glu Met Glu Leu Leu Tyr Ser Ala

50 55 60 Tyr Gly Asp Glu Thr Gly Val Gln Cys Ala Leu Ser Leu Gln Glu Phe 70 75 Val Lys Asp Ala Gly Ser Tyr Ser Lys Lys Val Val Asp Asp Leu Leu Asp Gln Ile Thr Gly Gly Asp His Ser Arg Thr Leu Phe Gln Leu Lys 105 Gln Arg Arg Asn Val Pro Met Lys Pro Pro Asp Glu Ala Lys Val Gly 120 Asp Thr Leu Gly Asp Ser Ser Ser Ser Val Leu Glu Phe Met Ser Met 135 Lys Ser Tyr Pro Asp Val Ser Val Asp Ile Ser Met Leu Ser Ser Leu 150 155 Gly Lys Val Lys Lys Glu Leu Asp Pro Asp Asp Ser His Leu Asn Leu 165 170 Asp Glu Thr Thr Lys Leu Leu Gln Asp Leu His Glu Ala Gln Ala Asp 180 185 Ala Ala Ala Leu Gly Xaa Arg Pro Thr Ser Ala Pro Cys Pro Thr Pro 200 Pro Arg Gly Thr Ser Thr Thr Trp Glu Ala Leu Leu Ala 215 <210> 947 <211> 316 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (293) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (312) <223> Xaa equals any of the naturally occurring L-amino acids

Glu Gln Tyr Val Cys Ala Gln Arg Asp Glu Tyr Leu Glu Ser Phe Cys

1				5	5				10)				15	5
Lys	Met	: Ala	Thr 20		J Lys	: Ile	e Sei	Val		⊋ Thi	: Ile	Phe	Gl ₃		val
Asn	Asn	Ser 35		Met	Lys	Ile	Asp 40		Ph∈	e Glr	ı Lev	Asp 45		n Glu	l Lys
Pro	Met 50		, Val	. Val	. Asp	Asp 55		ı Asp	Leu	ı Val	. Asp		Arç	j Lev	lle
Ser 65	Glu	Leu	Arg	Lys	Glu 70	_	Gly	Met	Thr	75 75		Asp	Phe	Phe	Met 80
Val	Leu	Thr	Asp	Val 85	_	Leu	Arg	Val	. Lys 90		Tyr	Туr	Glu	Val 95	Pro
Ile	Thr	Met	Lys 100		Val	Phe	Asp	Leu 105		Asp	Thr	Phe	Gln 110		Arg
Ile	Lys	Asp 115		Glu	Lys	Gln	Lys 120		Glu	Gly	Ile	Val 125	Суз	Lys	Glu
Asp	Lys 130	Lys	Gln	Ser	Leu	Glu 135	Asn	Phe	Leu	Ser	Arg 140	Phe	Arg	Trp	Arg
Arg 145	Arg	Leu	Leu	Val	Ile 150	Ser	Ala	Pro	Asn	Asp 155	Glu	Asp	Trp	Ala	Tyr 160
Ser	Gln	Gln	Leu	Ser 165	Ala	Leu	Ser	Gly	Gln 170	Ala	Суз	Asn	Phe	Gly 175	Leu
Arg	His	Ile	Thr 180	Ile	Leu	Lys	Leu	Leu 185	Gly	Val	Gly	Glu	Glu 190	Val	Gly
Gly	Val	Leu 195	Glu	Leu	Phe	Pro	11e 200	Asn	Gly	Ser	Ser	Val 205	Val	Glu	Arg
Glu	Asp 210	Val	Pro	Ala	His	Leu 215	Val	Lys	Asp	Ile	Arg 220	Asn	Tyr	Phe	Gln
Val 225	Ser	Pro	Glu	Tyr	Phe 230	Ser	Met	Leu	Leu	Val 235	Gly	Lys	Asp	Gly	Asn 240
/al	Lys	Ser	Trp	Tyr 245	Pro	Ser	Pro	Met	Trp 250	Ser	Met	Val	Ile	Val 255	Tyr
Asp	Leu	Ile	Asp 260	Ser	Met	Gln	Leu	Arg 265	Arg	Gln	Glu	Met	Ala 270	Ile	Gln
11 m	cor	T 011	C1	Wat	N ~~	~	Dro	C1	7	C1	m	7 7 a	O1	Massa	a 1

906

275 280 285 Tyr His Ser Tyr Xaa Gln Gly Tyr Gln Asp Gly Tyr Gln Asp Asp Tyr 295 Arg His His Glu Ser Tyr His Xaa Gly Tyr Pro Tyr 310 <210> 948 <211> 162 <212> PRT <213> Homo sapiens <400> 948 Ser Thr His Ala Ser Ala His Ala Ser Gly Lys Gln Cys Gln Asp Ser 10 Lys Asp Ser Asn His Leu Pro Lys Met Ser Leu Ser Ala Phe Thr Leu 25 Phe Leu Ala Leu Ile Gly Gly Thr Ser Gly Gln Tyr Tyr Asp Tyr Asp 40 Phe Pro Leu Ser Ile Tyr Gly Gln Ser Ser Pro Asn Cys Ala Pro Glu Cys Asn Cys Pro Glu Ser Tyr Pro Ser Ala Met Tyr Cys Asp Glu Leu Lys Leu Lys Ser Val Pro Met Val Pro Pro Gly Ile Lys Tyr Leu Tyr Leu Arg Asn Asn Gln Ile Asp His Ile Asp Glu Lys Ala Phe Glu Asn Val Thr Asp Leu Gln Trp Leu Ile Leu Asp His Asn Leu Leu Glu Asn

Ser Lys Ile Lys Gly Arg Val Phe Ser Lys Leu Lys Gln Leu Lys Lys

Leu His Ile Asn His Asn Asn Leu Thr Glu Ser Val Gly Pro Leu Pro

Lys Ser

<21	0> 9	49													
<21	1> 1	85													
<21	2> P	RT													
<21	3> H	omo	sapi	ens											
<22	0>														
<22	1> s	ITE													
<22	2> (114)													
<22	3> X	aa e	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<40	0> 9	49													
Leu 1	Gly	Phe	Asn	Tyr 5	-	Tyr	Lys	Туг	Ser 10		Glu	Gly	Asp	Ser 15	His
Leu	Gly	Gly	Gly 20		Arg	Glu	Gly	Ser 25	Phe	Lys	Glu	Thr	Ile 30	Thr	Leu
Lys	Trp	Cys 35	Thr	Pro	Arg	Thr	Asn 40	Asn	Ile	Glu	Leu	His 45	Tyr	Cys	Thr
Gly	Ala 50	_	Arg	Ile	Ser	Pro 55	Val	Asp	Val	Asn	Ser 60	Arg	Pro	Ser	Ser
Сув 65	Leu	Thr	Asn	Phe	Leu 70	Leu	Asn	Gly	Arg	Ser 75	Val	Leu	Leu	Glu	Gln 80
Pro	Arg	Lys	Ser	Gly 85	Ser	Lys	Val	Ile	ser 90	His	Met	Leu	Ser	Ser 95	His
Gly	Gly	Glu	Ile 100	Phe	Leu	His	Val	Leu 105	Ser	Ser	Ser	Arg	Ser 110	Ile	Leu
Glu	Xaa	Pro 115	Pro	Ser	Ile	Ser	Glu 120	Gly	Cys	Gly	Gly	Arg 125	Val	Thr	Asp
Tyr	Arg 130	Ile	Thr	Asp	Phe	Gly 135	Glu	Phe	Met	Arg	Glu 140	Asn	Arg	Leu	Thr
Pro 145	Phe	Leu	Asp	Pro	Arg 150	Tyr	Lys	Ile	Asp	Gly 155	Ser	Leu	Glu	Val	Pro 160
Leu	Glu	Arg	Ala	Lys 165	Asp	Gln	Leu	Glu	Lys 170	His	Thr	Arg	Tyr	Trp 175	Pro

185

<210> 950 <211> 169

Met Asp His Phe Thr Asn His His Phe

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (161)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 950

Pro Arg Arg Pro His Arg Ser Cys Asp Met Pro Ala Ser Gly Glu Pro
1 5 10 15

Leu Gly Cys Thr Pro Leu Leu Pro Asn Asp Ser Gly His Pro Ser Glu 20 25 30

Leu Gly Gly Thr Arg Arg Ala Gly Asn Gly Ala Leu Gly Gly Pro Lys $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ala His Arg Lys Leu Gln Thr His Pro Ser Leu Ala Ser Gln Gly Ser 50 55 60

Lys Lys Ser Lys Ser Ser Ser Lys Ser Thr Thr Ser Gln Ile Pro Leu 65 70 75 80

Gln Ala Gln Glu Asp Cys Cys Val His Cys Ile Leu Ser Cys Leu Phe $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$

Cys Glu Phe Leu Thr Leu Cys Asn Ile Val Leu Asp Cys Ala Thr Cys 100 105 110

Gly Ser Cys Ser Ser Glu Asp Ser Cys Leu Cys Cys Cys Cys Gly

Ser Gly Glu Cys Ala Asp Cys Asp Leu Pro Cys Asp Leu Asp Cys Gly 130 135 140

Ile Leu Asp Ala Cys Cys Glu Ser Ala Asp Cys Leu Glu Ile Cys Met 145 150 155 160

Xaa Cys Cys Gly Leu Cys Phe Ser Ser 165

<210> 951

<211> 288

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

PCT/US00/05882

	2> (3> X	•		s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
	0> 1> S 2> (
				s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
			Glu	Thr 5	_	Arg	Val	Pro	Glu 10	-	Asp	Thr	Lys	Arg	Met
Gln	Val	Cys	Leu 20	Leu	Ser	Ala	Met	Pro 25	Leu	Pro	Val	Ala	Leu 30	G1n	Thr
Arg	Leu	Ala 35	-	Arg	Gly	Ile	Leu 40	Lys	His	Leu	Glu	Pro 45	Glu	Pro	Glu
Glu	Glu 50		Ile	Ala	Glu	Asp 55	туг	Asp	Asp	Asp	Pro 60	Val	Asp	Tyr	Glu
Ala 65	Thr	Arg	Leu	Glu	Gly 70	Leu	Pro	Pro	Ser	Trp 75	Tyr	Lys	Val	Phe	Asp 80
Pro	Ser	Cys	Gly	Leu 85	Pro	Tyr	Tyr	Trp	Asn 90	Ala	Asp	Thr	Asp	Leu 95	Val
Ser	Trp	Leu	Ser 100	Pro	His	Asp	Pro	Asn 105	Ser	Val	Val	Thr	Lys 110	Ser	Ala
Lys	Lys	Leu 115	Arg	Ser	Ser	Asn	Ala 120	Asp	Ala	Glu	Glu	Lys 125	Leu	Asp	Arg
Ser	ніs 130	Asp	Lys	Ser	Asp	Arg 135	Gly	His	Asp	Lys	Ser 140	Asp	Arg	Ser	His
Glu 145	Lys	Leu	Asp	Arg	Gly 150	His	Asp	Lys	Ser	Asp 155	Arg	Gly	His	Asp	Lys 160
Xaa	Asp	Arg	Asp	Arg 165	Glu	Arg	Gly	Tyr	Asp 170	Lys	Val	Asp	Arg	Glu 175	Arg
Glu	Arg	Asp	Arg 180	Glu	Arg	Asp	Arg	Asp 185	Arg	Gly	Tyr	Asp	Lys 190	Ala	Asp
Arg	Glu	Glu 195	Gly	Lys	Glu	Arg	Arg 200	His	His	Arg	Arg	Glu 205	Glu	Leu	Ala
Pro	Tyr 210	Pro	Lys	Ser	Lys	Lys 215	Ala	Val	Ser	Arg	Lys 220	Asp	Glu	Glu	Leu

Asp Pro Met Asp Pro Ser Ser Tyr Ser Xaa Arg Pro Arg Gly Thr Trp 225 230 235 240

Ser Thr Gly Leu Pro Lys Arg Asn Glu Ala Lys Thr Gly Ala Asp Thr 245 250 255

Thr Ala Ala Gly Pro Leu Phe Gln Gln Arg Pro Tyr Pro Ser Pro Gly 260 265 270

Ala Val Leu Arg Ala Asn Ala Glu Ala Ser Arg Thr Lys Gln Gln Asp 275 280 285

<210> 952

<211> 323

<212> PRT

<213> Homo sapiens

<400> 952

Val Gly Gly Val Leu Pro Gly Trp Lys Leu Arg Pro Arg Ser Asp Gly
1 5 10 15

Gly Leu Ser Glu Asp Gly Pro Gly Arg Asp His Gly Gly Gly Ser Arg
20 25 30

Gly Gly Arg Gly Gly Ala Ala Gly Gly Arg Gly Gly Cys Gly Pro Gln 35 40 45

Gly Ala Val Gly Gly Met Ala Arg Ala Ser Ser Gly Asn Gly Ser 50 60

Glu Glu Ala Trp Gly Ala Leu Arg Ala Pro Gln Gln Gln Leu Arg Glu 65 70 75 80

Leu Cys Pro Gly Val Asn Asn Gln Pro Tyr Leu Cys Glu Ser Gly His
85 90 95

Cys Cys Gly Glu Thr Gly Cys Cys Thr Tyr Tyr Tyr Glu Leu Trp Trp 100 105 110

Phe Trp Leu Leu Trp Thr Val Leu Ile Leu Phe Ser Cys Cys Ala 115 120 125

Phe Arg His Arg Arg Ala Lys Leu Arg Leu Gln Gln Gln Gln Arg Gln 130 135 140

Arg Glu Ile Asn Leu Leu Ala Tyr His Gly Ala Cys His Gly Ala Gly

911

145					150					155					160
Pro	Phe	Pro	Thr	Gly 165	Ser	Leu	Leu	Asp	Leu 170	Arg	Phe	Leu	Ser	Thr 175	Phe
Lys	Pro	Pro	Ala 180	Tyr	Glu	Asp	Val	Val 185	His	Arg	Pro	Gly	Thr 190	Pro	Pro
Pro	Pro	Tyr 195	Thr	Val	Ala	Pro	Gly 200	Arg	Pro	Leu	Thr	Ala 205	Ser	Ser	Glu
Gln	Thr 210	Cys	Cys	Ser	Ser	Ser 215	Ser	Ser	Cys	Pro	Ala 220	His	Phe	Glu	Gly
Thr 225	Asn	Val	Glu	Gly	Val 230	Ser	Ser	His	Gln	Ser 235	Ala	Pro	Pro	His	Gln 240
Glu	Gly	Glu	Pro	Gly 245	Ala	Gly	Val	Thr	Pro 250	Ala	Ser	Thr	Pro	Pro 255	Ser
Cys	Arg	Tyr	Arg 260	Arg	Leu	Thr	Gly	Asp 265	Ser	Gly	Ile	Glu	Leu 270	Cys	Pro
Cys	Pro	Ala 275	Ser	Gly	Glu	Gly	Glu 280	Pro	Val	Lys	Glu	Val 285	Arg	Val	Ser
Ala	Thr 290	Leu	Pro	Asp	Leu	Glu 295	Asp	Tyr	Ser	Pro	Cys 300	Ala	Leu	Pro	Pro
Glu 305	Ser	Val	Pro	Gln	Ile 310	Phe	Pro	Met	Gly	Leu 315	Ser	Ser	Ser	Glu	Gly 320
Asp	Ile	Pro													
<210	> 95	.3													
<211															
<212															

<400> 953 Ala Lys Met Ser Val Asn Val Asn Arg Ser Val Ser Asp Gln Phe Tyr

<213> Homo sapiens

1 5 10 15

Arg Tyr Lys Met Pro Arg Leu Ile Ala Lys Val Glu Gly Lys Gly Asn \$20\$

Gly Ile Lys Thr Val Ile Val Asn Met Val Asp Val Ala Lys Ala Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Asn	Arg 50		Pro	Thr	Tyr	Pro 55		Lys	туг	. Ph∈	60 60		s Glu	. Leu	ı Gly
Ala 65		Thr	Gln	Phe	Asp 70		Lys	Asn	Asp	Arg 75	_	Ile	e Val	. Asr	Gl <u>y</u> 80
Ser	His	Glu	ı Ala	Asn 85	-	Leu	Gln	Asp	Met 90		Asp	Gly	Phe	95	-
Lys	Phe	· Val	Leu 100	-	Pro	Glu	Cys	Glu 105		Pro	Glu	Thr	110		His
Val	Asn	Pro 115	Lys	Lys	Gln	Thr	Ile 120	_	Asn	ser	Cys	Lys 125		. Cys	Gly
Tyr	Arg 130	_	Met	Leu	Asp	Thr 135		His	Lys	Leu	Cys 140		Phe	Ile	Leu
Lys 145		Pro	Pro	Glu	Asn 150	Ser	Asp	Ser	Gly	Thr 155		Lys	Lys	Glu	Lys 160
Glu	Lys	Lys	Asn	Arg 165	Lys	Gly	Lys	Asp	Lys 170		Asn	Gly	Ser	Val 175	
ser	Ser	Glu	Thr 180	Pro	Pro	Pro	Pro	Pro 185	Pro	Pro	Asn	Glu	Ile 190	Asn	Pro
Pro	Pro	His 195	Thr	Met	Glu	Glu	Glu 200	Glu	Asp	Asp	Asp	Trp 205	_	Glu	ązA
Thr	Thr 210	Glu	Glu	Ala	Gln	Arg 215	Arg	Arg	Met	Asp	Glu 220		Ser	Asp	His
Ala 225	Lys	Val	Leu	Thr	Leu 230	Ser	Asp	Asp	Leu	Glu 235	Arg	Thr	Ile	Glu	G1u 240
			Ile	245					250	_	-	-		255	
			Ser 260				•	265					270		
		275	Ala				280					285			
	290		Arg			295					300				
he 05	Cys	His	Asn	Asn	Lys 310	Lys	Ala	Gln	Arg	Tyr 315	Leu	Leu	His	Gly	Leu 320

913

Glu Cys Val Val Ala Met His Gln Ala Gln Leu Ile Ser Lys Ile Pro

His Ile Leu Lys Glu Met Tyr Asp Ala Asp Leu Leu Glu Glu Val 340 345 350

Ile Ile Ser Trp Ser Glu Lys Ala Ser Lys Lys Tyr Val Ser Lys Glu 355 360 365

Leu Ala Lys Glu Ile Arg Val Lys Ala Glu Pro Phe Ile Lys Trp Leu 370 375 380

Lys Glu Ala Glu Glu Glu Ser Ser Gly Gly Glu Glu Glu Asp Glu Asp 385 390 395 400

Glu Asn Ile Glu Val Val Tyr Ser Lys Ala Ala Ser Val Pro Lys Val
405 410 415

Glu Thr Val Lys Ser Asp Asn Lys Asp Asp Asp Ile Asp Ile Asp Ala 420 425 430

Ile

<210> 954

<211> 428

<212> PRT

<213> Homo sapiens

<400> 954

Gly Tyr Gln Ile Gly Met Ala Leu Ala Ser Gly Pro Ala Arg Arg Ala 1 5 10 15

Leu Ala Gly Ser Gly Gln Leu Gly Leu Gly Gly Phe Gly Ala Pro Arg
20 25 30

Arg Gly Ala Tyr Glu Trp Gly Val Arg Ser Thr Arg Lys Ser Glu Pro 35 40 45

Pro Pro Leu Asp Arg Val Tyr Glu Ile Pro Gly Leu Glu Pro Ile Thr 50 60

Phe Ala Gly Lys Met His Phe Val Pro Trp Leu Ala Arg Pro Ile Phe 65 70 75 80

Pro Pro Trp Asp Arg Gly Tyr Lys Asp Pro Arg Phe Tyr Arg Ser Pro 85 90 95

- Pro Leu His Glu His Pro Leu Tyr Lys Asp Gln Ala Cys Tyr Ile Phe
 100 105 110

 His His Arg Cys Arg Leu Leu Glu Gly Val Lys Gln Ala Leu Trp Leu
- 115 120 125
- Thr Lys Thr Lys Leu Ile Glu Gly Leu Pro Glu Lys Val Leu Ser Leu 130 135 140
- Val Asp Asp Pro Arg Asn His Ile Glu Asn Gln Asp Glu Cys Val Leu 145 150 155 160
- Asn Val Ile Ser His Ala Arg Leu Trp Gln Thr Thr Glu Glu Ile Pro 165 170 175
- Lys Arg Glu Thr Tyr Cys Pro Val Ile Val Asp Asn Leu Ile Gln Leu 180 185 190
- Cys Lys Ser Gln Ile Leu Lys His Pro Ser Leu Ala Arg Arg Ile Cys 195 200 205
- Val Gln Asn Ser Thr Phe Ser Ala Thr Trp Asn Arg Glu Ser Leu Leu 210 215 220
- Leu Gln Val Arg Gly Ser Gly Gly Ala Arg Leu Ser Thr Lys Asp Pro 225 230 235 240
- Leu Pro Thr Ile Ala Ser Arg Glu Glu Ile Glu Ala Thr Lys Asn His 245 250 255
- Val Leu Glu Thr Phe Tyr Pro Ile Ser Pro Ile Ile Asp Leu His Glu 260 265 270
- Cys Asn Ile Tyr Asp Val Lys Asn Asp Thr Gly Phe Gln Glu Gly Tyr 275 280 285
- Pro Tyr Pro Tyr Pro His Thr Leu Tyr Leu Leu Asp Lys Ala Asn Leu 290 295 300
- Arg Pro His Arg Leu Gln Pro Asp Gln Leu Arg Ala Lys Met Ile Leu 305 310 315 320
- Phe Ala Phe Gly Ser Ala Leu Ala Gln Ala Arg Leu Leu Tyr Gly Asn 325 330 335
- Asp Ala Lys Val Leu Glu Gln Pro Val Val Val Gln Ser Val Gly Thr 340 345 350
- Asp Gly Arg Val Phe His Phe Leu Val Phe Gln Leu Asn Thr Thr Asp 355 360 365

Leu Asp Ser Asn Glu Gly Val Lys Asn Leu Ala Trp Val Asp Ser Asp 375 Gln Leu Leu Tyr Gln His Phe Trp Cys Leu Pro Val Ile Lys Lys Arg 390 395 Val Val Val Glu Pro Val Gly Pro Val Gly Phe Lys Pro Glu Thr Phe Arg Lys Phe Leu Ala Leu Tyr Leu His Gly Ala Ala 420 425 <210> 955 <211> 169 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (131) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (140) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (166) <223> Xaa equals any of the naturally occurring L-amino acids <400> 955 Asp Pro Arg Val Arg Pro Arg Val Arg Pro Arg Val Arg Glu Pro Gly Asp Arg Met Leu Val Leu Val Leu Gly Asp Leu His Ile Pro His Arg Cys Asn Ser Leu Pro Ala Lys Phe Lys Lys Leu Leu Val Pro Gly Lys 40

Asp Tyr Leu Lys Thr Leu Ala Gly Asp Val His Ile Val Arg Gly Asp

75

70

65

Ile Gln His Ile Leu Cys Thr Gly Asn Leu Cys Thr Lys Glu Ser Tyr

Phe Asp Glu Asn Leu Asn Tyr Pro Glu Gln Lys Val Val Thr Val Gly

916

85 90 95 Gln Phe Lys Ile Gly Leu Ile His Gly His Gln Val Ile Pro Trp Gly 105 Asp Met Ala Ser Leu Ala Leu Leu Gln Arg Gln Phe Asp Val Asp Ile 120 Leu Ile Xaa Gly His Thr His Lys Phe Glu Ala Xaa Glu His Glu Asn 135 140 Lys Phe Tyr Ile Asn Pro Gly Ser Ala Thr Gly Ala Tyr Asn Ala Leu 150 155 Glu Thr Asn Ile Ile Xaa Ser Leu Cys 165 <210> 956 <211> 39 <212> PRT <213> Homo sapiens <400> 956 Ser Pro Tyr Cys Gly Leu Gln Val Met Leu Phe Leu Leu His His Thr Leu Trp Cys Leu Leu Pro Cys Ala Ser Ser Leu Arg Leu Ile Lys Lys Val Ser Arg Leu Leu Gln Leu 35 <210> 957 <211> 219 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (7) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

<223> Xaa equals any of the naturally occurring L-amino acids

<222> (9)

<400> 957

Gln Gly His Cys Gly Cys Xaa Leu Xaa Ser Leu Leu Ala Asn Gly His 1 5 10 15

Asp Leu Ala Ala Ala Met Ala Val Asp Lys Ser Asn Pro Thr Ser Lys

His Lys Ser Gly Ala Val Ala Ser Leu Leu Ser Lys Ala Glu Arg Ala 35 40 45

Thr Glu Leu Ala Ala Glu Gly Gln Leu Thr Leu Gln Gln Phe Ala Gln 50 55 60

Ser Thr Glu Met Leu Lys Arg Val Val Gln Glu His Leu Pro Leu Met 65 70 75 80

Ser Glu Ala Gly Ala Gly Leu Pro Asp Met Glu Ala Val Ala Gly Ala 85 90 95

Glu Ala Leu Asn Gly Gln Ser Asp Phe Pro Tyr Leu Gly Ala Phe Pro 100 105 110

Ile Asn Pro Gly Leu Phe Ile Met Thr Pro Ala Gly Val Phe Leu Ala 115 120 125

Glu Ser Ala Leu His Met Ala Gly Leu Ala Glu Tyr Pro Met Gln Gly 130 135 140

Glu Leu Ala Ser Ala Ile Ser Ser Gly Lys Lys Lys Arg Lys Arg Cys 145 150 155 160

Gly Met Cys Ala Pro Cys Arg Arg Ile Asn Cys Glu Gln Cys Ser 165 170 175

Ser Cys Arg Asn Arg Lys Thr Gly His Gln Ile Cys Lys Phe Arg Lys 180 185 190

Cys Glu Glu Leu Lys Lys Lys Pro Ser Ala Ala Leu Glu Lys Val Met 195 200 205

Leu Pro Thr Gly Ala Ala Phe Arg Trp Phe Gln 210 215

<210> 958

<211> 259

<212> PRT

<213> Homo sapiens

<220>

<221> SITE <222> (21) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (74) <223> Xaa equals any of the naturally occurring L-amino acids Leu Pro Gln Asn Ala Val Leu Glu Ala Asp Phe Ala Lys Arg Gly Tyr 10 Lys Leu Pro Lys Xaa Arg Lys Thr Gly Thr Thr Ile Ala Gly Val Val 20 25 Tyr Lys Asp Gly Ile Val Leu Gly Ala Asp Thr Arg Ala Thr Glu Gly 40 Met Val Val Ala Asp Lys Asn Cys Ser Lys Ile His Phe Ile Ser Pro Asn Ile Tyr Cys Cys Gly Ala Gly Thr Xaa Ala Asp Thr Asp Met Thr Thr Gln Leu Ile Ser Ser Asn Leu Glu Leu His Ser Leu Ser Thr Gly 90 Arg Leu Pro Arg Val Val Thr Ala Asn Arg Met Leu Lys Gln Met Leu 105 Phe Arg Tyr Gln Gly Tyr Ile Gly Ala Ala Leu Val Leu Gly Gly Val 120 Asp Val Thr Gly Pro His Leu Tyr Ser Ile Tyr Pro His Gly Ser Thr Asp Lys Leu Pro Tyr Val Thr Met Gly Ser Gly Ser Leu Ala Ala Met . 155 Ala Val Phe Glu Asp Lys Phe Arg Pro Asp Met Glu Glu Glu Ala 170 Lys Asn Leu Val Ser Glu Ala Ile Ala Ala Gly Ile Phe Asn Asp Leu 180 185 Gly Ser Gly Ser Asn Ile Asp Leu Cys Val Ile Ser Lys Asn Lys Leu 200 Asp Phe Leu Arg Pro Tyr Thr Val Pro Asn Lys Lys Gly Thr Arg Leu

215

220

•

Gly Arg Tyr Arg Cys Glu Lys Gly Thr Thr Ala Val Leu Thr Glu Lys 225 230 230 235

Ile Thr Pro Leu Glu Ile Glu Val Leu Glu Glu Thr Val Gln Thr Met 245 250 255

Asp Thr Ser

<210> 959

<211> 75

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 959

Phe Trp Ser Ala Ala Lys Phe Asp Phe Thr Ser His Thr Pro Phe Leu 1 5 10 15

Pro Leu Glu Met Gln Phe Arg Gln Arg Pro Cys Gly Glu Ser Cys Asn 20 25 30

Ile Lys Phe Xaa Phe Arg Arg Ser Xaa Pro Gln Thr Ser Glu Pro Leu
35 40 45

Ala Val Leu Pro Xaa Asn Lys Asn Glu Leu Glu Lys Lys Val Ala Gln 50 55 60

Leu Gln Arg Ser Lys Ser Ser Tyr Phe Pro Thr 65 70 75

<210> 960

920

<211> 128 <212> PRT <213> Homo sapiens <400> 960 Gln Ser Arg Gly Leu Arg Leu Leu Gly Pro Gly Asp Gly Ala Gly Met 10 Thr Pro Gly Val Val His Ala Ser Pro Pro Gln Ser Gln Arg Val Pro 25 Arg Gln Ala Pro Cys Glu Trp Ala Ile Arg Asn Ile Gly Gln Lys Pro 40 Lys Glu Pro Asn Cys His Asn Cys Gly Thr His Ile Gly Leu Arg Ser Lys Thr Leu Arg Gly Thr Pro Asn Tyr Leu Pro Ile Arg Gln Asp Thr His Pro Pro Ser Val Ile Phe Cys Leu Ala Gly Val Gly Val Pro Gly Gly Thr Cys Arg Pro Ala Pro Cys Val Pro Arg Phe Ala Ala Leu Pro 105 Trp Ala Thr Asn His Pro Gly Pro Gly Cys Leu Ser Asp Leu Arg Ala

<210> 961 <211> 564 <212> PRT <213> Homo sapiens

<400> 961

Lys Met Lys Ser Val Lys Ile Ala Phe Ala Val Thr Leu Glu Thr Val 1 5 10 15

120

Leu Ala Gly His Glu Asn Trp Val Asn Ala Val His Trp Gln Pro Val \$20\$ \$25\$ 30

Phe Tyr Lys Asp Gly Val Leu Gln Gln Pro Val Arg Leu Leu Ser Ala

Ser Met Asp Lys Thr Met Ile Leu Trp Ala Pro Asp Glu Glu Ser Gly 50 55

65	_	Leu	GIU	GIN	70	-	vai	. Сту	GIU	75		, ст	' Asn	. Thr	80 Fea
Gly	Phe	Tyr	Asp	Cys 85		Phe	Asn	Glu	Asp 90		Ser	Met	Ile	Ile 95	
His	Ala	Phe	His 100	_	Ala	Leu	His	Leu 105	_	Lys	Gln	Asn	110		Asn
Pro	Arg	Glu 115	-	Thr	Pro	Glu	Ile 120		Ile	Ser	Gly	His 125		Asp	Gly
Val	Gln 130		Leu	Val	Trp	Asp 135	Pro	Glu	Gly	Glu	Phe 140		Ile	Thr	Val
Gly 145	Thr	Asp	Gln	Thr	Thr 150	Arg	Leu	Phe	Ala	Pro 155		Ĺys	Arg	Lys	Asp 160
Gln	Ser	Gln	Val	Thr 165	-	His	Glu	Ile	Ala 170	-	Pro	Gln	Ile	His 175	_
Tyr	Asp	Leu	Lys 180	_	Leu	Ala	Met	Ile 185	Asn	Arg	Phe	Gln	Phe 190	Val	Ser
Gly	Ala	Asp 195	Glu	Lys	Val	Leu	Arg 200	Val	Phe	Ser	Ala	Pro 205	Arg	Asn	Phe
Val	Glu 210	Asn	Phe	Cys	Ala	Ile 215	Thr	Gly	Gln	Ser	Leu 220	Asn	His	Val	Leu
Cys 225	Asn	Gln	Asp	Ser	Asp 230	Leu	Pro	Glu	Gly	Ala 235	Thr	Val	Pro	Ala	Leu 240
Зly	Leu	Ser	Asn	Lys 245	Ala	Val	Phe	Gln	G1y 250	Asp	Ile	Ala	Ser	Gln 255	Pro
Ser	Asp	Glu	Glu 260	Glu	Leu	Leu	Thr	Ser 265	Thr	Gly	Phe	Glu	Tyr 270	Gln	Gln
/al	Ala	Phe 275	Gln	Pro	Ser	Ile	Leu 280	Thr	Glu	Pro	Pro	Thr 285	Glu	Asp	His
en	Leu 290	Gln	Asn	Thr	Leu	Trp 295	Pro	Glu	Val	Gln	Lys 300	Leu	Tyr	Gly	His
105					310		Thr			315					320
la	Ser	Ala		Lys 325		Ala	Lys	Lys			Ala	Ala	Ile	Ile	

PCT/US00/05882

Trp Asn Thr Thr Ser Trp Lys Gln Val Gln Asn Leu Val Phe His Ser 340 345 350

Leu Thr Val Thr Gln Met Ala Phe Ser Pro Asn Glu Lys Phe Leu Leu 355 360 365

Ala Val Ser Arg Asp Arg Thr Trp Ser Leu Trp Lys Lys Gln Asp Thr 370 375 380

Ile Ser Pro Glu Phe Glu Pro Val Phe Ser Leu Phe Ala Phe Thr Asn 385 390 395 400

Lys Ile Thr Ser Val His Ser Arg Ile Ile Trp Ser Cys Asp Trp Ser 405 410 415

Pro Asp Ser Lys Tyr Phe Phe Thr Gly Ser Arg Asp Lys Lys Val Val 420 425 430

Val Trp Gly Glu Cys Asp Ser Thr Asp Asp Cys Ile Glu His Asn Ile 435 440 445

Gly Pro Cys Ser Ser Val Leu Asp Val Gly Gly Ala Val Thr Ala Val 450 455 460

Ser Val Cys Pro Val Leu His Pro Ser Gln Arg Tyr Val Val Ala Val 465 470 470 485

Gly Leu Glu Cys Gly Lys Ile Cys Leu Tyr Thr Trp Lys Lys Thr Asp
485 490 495

Gln Val Pro Glu Ile Asn Asp Trp Thr His Cys Val Glu Thr Ser Gln 500 505 510

Ser Gln Ser His Thr Leu Ala Ile Arg Lys Leu Cys Trp Lys Asn Cys 515 520 525

Ser Gly Lys Thr Glu Gln Lys Glu Ala Glu Gly Ala Glu Trp Leu His 530 535 540

Phe Ala Ser Cys Gly Glu Asp His Thr Val Lys Ile His Arg Val Asn 545 550 555 560

Lys Cys Ala Leu

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<210> 962

<211> 43

<212> PRT

923

<213> Homo sapiens

<400> 962

Phe Lys Tyr Val Lys Cys Gly Ser Phe Thr Pro His His Ser Glu His 1 5 10 15

Thr Gly Glu Met Cys Phe Phe Gly Lys Leu Lys Gly Ala Ser Ser Leu 20 25 30

Ile Gln Arg Asn Ile Ser His Val Cys Ser Phe 35 40

<210> 963

<211> 132

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (131)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 963

Glu Ser Arg Val Asp Pro Arg Val Arg Glu Arg Ser Ala Arg Thr Ala 1 5 10 15

Gly Ala Thr Val Gly Pro Ala Ala Val Met Ser Val Leu Arg Pro Leu

Asp Lys Leu Pro Gly Leu Asn Thr Ala Thr Ile Leu Leu Val Gly Thr 35 40 45

Glu Asp Ala Leu Leu Gln Gln Leu Ala Asp Ser Met Leu Lys Glu Asp 50 55 60

Cys Ala Ser Glu Leu Lys Val His Leu Ala Lys Ser Leu Pro Leu Pro 65 70 75 80

Ser Ser Val Asn Arg Pro Arg Ile Asp Leu Ile Val Phe Val Val Asn 85 90 95

Leu His Ser Lys Tyr Ser Leu Gln Asn Thr Glu Glu Ser Leu Arg His
100 105 110

Val Asp Ala Ser Phe Phe Leu Gly Lys Val Cys Phe Leu Ala Thr Gly 115 120 125

Gly Gly Xaa Leu

	.0> 9 .1> 1														
<21	2> 1	PRT													
<21	.3> F	omo	sapi	.ens											
<22															
	1> 5														
	2> (3						.
		aa e	equai	s an	y or	tne	nat	uraı	ту с	ccur	ring	ь⊸а	mino	acı	as
<22	0> 1> s	ישיתד													
	2> (
			qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<40	0> 9	64													
His 1		Arg	Ser	Cys 5	-	Asp	Ala	Arg	Ser 10		Ala	Xaa	Gln	Gly 15	Arg
Gly	Arg	Val	Gly 20		Gly	Ala	Gly	Ala 25		Trp	Ser	Ser	Сув 30	Gly	Val
Ser	Gly	Pro		Arg	Gly	Met	Gly 40	۷al	Leu	Ala	Ala	Ala 45	Ala	Arg	Cys
Leu		Arg	Gly	Ala	Asp		Met	Ser	Lys	Trp		Ser	Lys	Arg	Gly
	50					55					60				
Pro 65	Arg	Ser	Phe	Arg	Gly 70	Arg	Xaa	Gly	Arg	Gly 75	Ala	Lys	Gly	Ile	Gly 80
Phe	Leu	Thr	Ser	_	Trp	Arg	Phe	Val		Ile	Lys	Glu	Met		Pro
				85					90					95	
Glu	Phe	Val	Val 100	Pro	Asp	Leu	Thr	Gly 105	Phe	Lys	Leu	Lys	Pro 110	туг	Val
Ser	Tyr	Leu 115	Ala	Pro	Glu	Ser	Glu 120	Glu	Thr	Pro	Leu	Thr 125	Ala	Ala	Gln
Leu	Phe 130	Ser	Glu	Ala	Val	Ala 135	Pro	Ala	Ile	Glu	Lys 140	Asp	Phe	Lys	Asp
	Thr	Phe	Asp	Pro		Asn	Leu	Glu	Lys		Gly	Phe	Glu	Pro	
145					150					155					160
Gln	Glu	Gly	Lys	Leu 165	Phe	Gln	Leu	Tyr	Pro 170	Arg	Asn	Phe	Leu	Arg 175	

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<21	U> 9	05													
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<21	2> F	RT													
<21	3> H	omo	sapi	.ens											
<22	0>														
	1> s	TTE													
		356)													
		,		s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
<40	0> 9	65													
Leu 1		Arg	Arg	Leu 5	-	Thr	Ala	Val	Pro 10	-	Ser	Leu	Glu	Ala 15	Gln
Lys	Arg	Lys	Pro 20		Pro	Gly	Pro	Gly 25	Ser	Leu	Asp	Leu	Val 30		Leu
Gly	Ser	Gly 35		Ser	Gly	Ser	Gln 40	_	Thr	Val	Leu	Ile 45	Met	Asp	Lys
Gln	Asn 50	Ser	Gln	Met	Asn	Ala 55	Ser	His	Pro	Glu	Thr 60	Asn	Leu	Pro	Val
Gly 65	Tyr	Pro	Pro	Gln	Туг 70	Pro	Pro	Thr	Ala	Phe 75	Gln	Gly	Pro	Pro	Gly 80
Tyr	Ser	Gly	Tyr	Pro 85	Gly	Pro	Gln	Val	Ser 90	Tyr	Pro	Pro	Pro	Pro 95	Ala
Gly	His	Ser	Gly 100	Pro	Gly	Pro	Ala	Gly 105	Phe	Pro	Val	Pro	Asn 110	Gln	Pro
Val	Tyr	Asn 115	Gln	Pro	Val	Tyr	Asn 120	Gln	Pro	Val	Gly	Ala 125	Ala	Gly	Val
Pro	Trp 130	Met	Pro	Ala	Pro	Gln 135	Pro	Pro	Leu	Asn	Cys 140	Pro	Pro	Gly	Leu
Glu 145	Tyr	Leu	Ser	Gln	Ile 150	Asp	Gln	Ile	Leu	Ile 155	His	Gln	Gln	Ile	Glu 160
Leu	Leu	Glu	Val	Leu 165	Thr	Gly	Phe	Glu	Thr 170	Asn	Asn	Lys	Tyr	Glu 175	Ile
Суs	Asn	Ser	Phe 180	Gly	Gln	Arg	Val	туг 185	Phe	Ala	Ala	Glu	Asp 190	Thr	Asp

Cys Cys Thr Arg Asn Cys Cys Gly Pro Ser Arg Pro Phe Thr Leu Arg

Ile	Ile 210		Asn	Met	G1y	Gln 215		Val	Ile	Thr	Leu 220		Arg	Pro	Leu
Arg 225		Ser	Ser	Cys	Cys 230		Pro	Cys	Cys	Leu 235		Glu	Ile	Glu	Ile 240
Gln	Ala	Pro	Pro	Gly 245		Pro	Ile	Gly	Туг 250		Ile	Gln	Thr	Trp 255	His
Pro	Cys	Leu	Pro 260	_	Phe	Thr	Ile	Gln 265		Glu	Lys	Arg	Glu 270	Asp	Val
Leu	Lys	Ile 275	Ser	Gly	Pro	Cys	Val 280	Val	Cys	Ser	Cys	Cys 285	Gly	Asp	Val
Asp	Phe 290	Glu	Ile	Lys	Ser	Leu 295	Asp	Glu	Gln	Суз	Val 300	Val	Gly	Lys	Ile
Ser 305	Lys	His	Trp	Thr	Gly 310	Ile	Leu	Arg	Glu	Ala 315	Phe	Thr	Asp	Ala	Asp 320
Asn	Phe	Gly	Ile	Gln 325	Phe	Pro	Leu	Asp	Leu 330	Asp	Val	Lys	Met	Lys 335	Ala
Val	Met	Ile	Gly 340	Ala	Сув	Phe	Leu	Ile 345	Asp	Phe	Met	Phe	Phe 350	Glu	Ser
Thr	Gly	Ser 355	Xaa	Glu	Gln	Lys	Ser 360	Gly	Val	Trp					
)> 96														
	l> 13 !> PF														
<213	3> Hc	omo s	apie	ens											
	> 96		••• · _		•	•	3 1 -	~ 1		0 7	• • •	01 '			
1	GIU	vai	HIS	Thr 5	Arg	тÀг	GIN	GIÀ	10	GIU	Ala	GIU	Pro	15	Ala
Met	Ser	Gly	Glu 20	Pro	Gly	Gln	Thr	Ser 25	Val	Ala	Pro	Pro	Pro 30	Glu	Glu
Val	Glu	Pro 35	Gly	Ser	Gly	Val	Arg 40	Ile	Val	Val	Glu	Tyr 45	Cys	Glu	Pro
Cys	Gly 50	Phe	Glu	Ala	Thr	Tyr 55	Leu	Glu	Leu	Ala	Ser 60	Ala	Val	Lys	Glu

Gln Tyr Pro Gly Ile Glu Ile Glu Ser Arg Leu Gly Gly Thr Gly Ala 70 Phe Glu Ile Glu Ile Asn Gly Gln Leu Val Phe Ser Lys Leu Glu Asn 90 85 Gly Gly Phe Pro Tyr Glu Lys Asp Leu Ile Glu Ala Ile Arg Arg Ala 105 Ser Asn Gly Glu Thr Leu Glu Lys Ile Thr Asn Ser Arg Pro Pro Cys 120 Val Ile Leu 130 <210> 967 <211> 344 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (68) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (306) <223> Xaa equals any of the naturally occurring L-amino acids <400> 967 Pro Thr Pro Ala Ser His Ser Pro Ser Pro Ser Leu Pro Ala Leu Pro Pro Ser Pro Pro His Arg Pro Asp Ser Pro Leu Phe Asn Ser Arg Cys 20 25 Ser Ser Pro Leu Gln Leu Asn Leu Leu Gln Leu Glu Glu Leu Pro Arg Ala Glu Gly Ala Ala Val Ala Gly Gly Pro Gly Ser Ser Ala Gly Pro 50 55 Pro Pro Pro Xaa Ala Glu Ala Glu Pro Glu Ala Arg Leu Ala Glu 70 Val Thr Glu Ser Ser Asn Gln Asp Ala Leu Ser Gly Ser Ser Asp Leu

90

95

Ala Ser Gly Ser Leu Gly Ser Gly Leu Gly Ser Gly Ser Gly 120 Ser His Glu Gly Gly Ser Thr Ser Ala Ser Ile Thr Arg Ser Ser Gln 135 Ser Ser His Thr Ser Lys Tyr Phe Gly Ser Ile Asp Ser Ser Glu Ala 155 Glu Ala Gly Ala Ala Arg Gly Gly Ala Glu Pro Gly Asp Gln Val Ile 170 Lys Tyr Val Leu Gln Asp Pro Ile Trp Leu Leu Met Ala Asn Ala Asp 180 185 Gln Arg Val Met Met Thr Tyr Gln Val Pro Ser Arg Asp Met Thr Ser 200 Val Leu Lys Gln Asp Arg Glu Arg Leu Arg Ala Met Gln Lys Gln Gln 215 Pro Arg Phe Ser Glu Asp Gln Arg Arg Glu Leu Gly Ala Val His Ser 230 235 Trp Val Arg Lys Gly Gln Leu Pro Arg Ala Leu Asp Val Met Ala Cys Val Asp Cys Gly Ser Ser Thr Gln Asp Pro Gly His Pro Asp Asp Pro

Leu Glu Leu Leu Gln Glu Asp Ser Arg Ser Gly Thr Gly Ser Ala 100 105 110

Cys Xaa Glu Ala Gln Gly Gly Ala Lys Ala Ser Ser Ser Gln Asp Leu 305 310 315 320

Leu Phe Ser Glu Leu Asp Gly Leu Gly Leu Glu Pro Met Glu Gly

Gly Gly Glu Gln Gly Ser Ser Gly Gly Gly Ser Gly Glu Gly Glu Gly

Ala Met Glu Glu Glu Glu Gly Arg Ser Ser Ser Pro Ala Leu 325 330 335

Pro Thr Ala Gly Asn Cys Thr Ser 340

<210> 968 <211> 67 <212> PRT <213> Homo sapiens <400> 968

Arg Cys Ser Ser Phe Phe Leu Ser Leu Leu Val Lys Ile Thr Asn Ile 1 51015

Trp Glu Gly Phe Lys Asp Ala Cys Tyr Gly Ala Asn Val Leu Ser Leu 20 25 30

Leu Asn Ser Arg Ser Glu Leu Leu Thr Cys Ile Gln Asn Ile Asn Ala $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Gln Asn Leu Tyr Met Ser Pro Ile Arg Lys Ile His Trp His Ala Thr 50 60

Gly Asp Ser 65

<210> 969 <211> 325 <212> PRT <213> Homo sapiens

<400> 969

Leu Asn Leu Arg Ser Pro His Ile Cys Phe Arg Ser Ser Lys Pro Ser 1 $$ 15

Trp Ala Asp Gln Val Glu Glu Glu Gly Glu Asp Asp Lys Cys Val Thr 20 25 30

Ser Glu Leu Lys Gly Ile Pro Leu Ala Thr Gly Asp Thr Ser Pro 35 40 45

Glu Pro Glu Leu Leu Pro Gly Ala Pro Leu Pro Pro Lys Glu Val 50 55 60

Ile Asn Gly Asn Ile Lys Thr Val Thr Glu Tyr Lys Ile Asp Glu Asp 65 70 75 80

Gly Lys Lys Phe Lys Ile Val Arg Thr Phe Arg Ile Glu Thr Arg Lys 85 90 95

Ala Ser Lys Ala Val Ala Arg Arg Lys Asn Trp Lys Lys Phe Gly Asn 100 105 110

Ser Glu Phe Asp Pro Pro Gly Pro Asn Val Ala Thr Thr Thr Val Ser

930

		115					120					125			
Asp	Asp 130	Val	Ser	Met	Thr	Phe 135	Ile	Thr	Ser	Lys	Glu 140	Asp	Leu	Asn	Сұз
Gln 145	Glu	Glu	Glu	Asp	Pro 150	Met	Asn	Lys	Leu	Lys 155	Gly	Gln	Lys	Ile	Val 160
Ser	Cys	Arg	Ile	Cys 165	Lys	Gly	Asp	His	Trp 170	Thr	Thr	Arg	Cys	Pro 175	Tyr
Lys	Asp	Thr	Leu 180	Gly	Pro	Met	Gln	Lys 185	Glu	Leu	Ala	Glu	Gln 190	Leu	Gly
Leu	Ser	Thr 195	Gly	Glu	Lys	Glu	Lys 200	Leu	Pro	Gly	Glu	Leu 205	Glu	Pro	Val
Gln	Ala 210	Thr	Gln	Asn	Lys	Thr 215	Gly	Lys	Tyr	Val	Pro 220	Pro	Ser	Leu	Arg
Asp 225	Gly	Ala	Ser	Arg	Arg 230	Gly	Glu	Ser	Met	Gln 235	Pro	Asn	Arg	Arg	Ala 240
Asp	Asp	Asn	Ala	Thr 245	Ile	Arg	Val	Thr	Asn 250	Leu	Ser	Glu	Asp	Thr 255	Arg
Glu	Thr	Asp	Leu 260	Gln	Glu	Leu	Phe	Arg 265	Pro	Phe	Gly	Ser	Ile 270	Ser	Arg
Ile	Tyr	Leu 275	Ala	Lys	Asp	Lys	Thr 280	Thr	Gly	Gln	Ser	Lys 285	Gly	Phe	Ala
Phe	Ile 290	Ser	Phe	His	Arg	Arg 295	Glu	Asp	Ala	Ala	Arg 300	Ala	Ile	Ala	Gly
Val 305	Ser	Gly	Phe	Gly	Tyr 310	Asp	His	Leu	Ile	Leu 315	Asn	Val	Glu	Trp	Ala 320
Lys	Pro	Ser	Thr	Asn 325											

<210> 970 <211> 357 <212> PRT

<213> Homo sapiens

Val Arg Val Lys Met Ala Ala Ala Glu Ala Ala Asn Cys Ile Met Glu

1 5 10 15

Val	. Ser	Сув	Gly 20		ı Ala	Glu	Ser	Ser 25		Lys	Pro	Asn	Ala 30		Asp
Met	Thr	Ser 35	_	Asp	Tyr	Tyr	Phe 40	_	Ser	Tyr	Ala	His 45		Gly	Ile
His	Glu 50		Met	Leu	Lys	Asp 55	Glu	Val	Arg	Thr	Leu 60	Thr	Tyr	Arg	Asn
Ser 65		Phe	His	Asn	Arg 70		Leu	Phe	Lys	Asp 75	-	Val	Val	Leu	Asp 08
Val	Gly	Ser	Gly	Thr 85		Ile	Leu	Cys	Met 90	Phe	Ala	Ala	Lys	Ala 95	Gly
Ala	Arg	Lys	Val 100		Gly	Ile	Glu	Cys 105	Ser	Ser	Ile	Ser	Asp 110	Tyr	Ala
Val	Lys	Ile 115	Val	Lys	Ala	Asn	Lys 120	Leu	Asp	His	Val	Val 125	Thr	Ile	Ile
Lys	Gly 130	Lys	Val	Glu	Glu	Val 135	Glu	Leu	Pro	Val	Glu 140	Lys	Val	Asp	Ile
Ile 145	Ile	Ser	Glu	Trp	Met 150	Gly	Tyr	Суз	Leu	Phe 155	Tyr	Glu	Ser	Met	Leu 160
Asn	Thr	Val	Leu	Туг 165	Ala	Arg	Asp	Lys	Trp 170	Leu	Ala	Pro	Asp	Gly 175	Leu
Ile	Phe	Pro	Asp 180	Arg	Ala	Thr	Leu	Tyr 185	Val	Thr	Ala	Ile	Glu 190	Asp	Arg
Gln	Tyr	Lys 195	Asp	Tyr	Lys	Ile	His 200	Trp	Trp	Glu	Asn	Val 205	Tyr	Gly	Phe
Asp	Met 210	Ser	Сув	Ile	Lys	Asp 215	Val	Ala	Ile	Lys	Glu 220	Pro	Leu	Val	Asp
Val 225	Val	Asp	Pro	Lys	Gln 230	Leu	Val	Thr	Asn	Ala 235	Cys	Leu	Ile	Lys	Glu 240
Val	Asp	Ile	Tyr	Thr 245	Val	Lys	Val	Glu	Asp 250	Leu	Thr	Phe	Thr	ser 255	Pro
Phe	Cys	Leu	Gln 260	Val	Lys	Arg		Asp 265	Tyr	Val	His		Leu 270	Val	Ala

Tyr Phe Asn Ile Glu Phe Thr Arg Cys His Lys Arg Thr Gly Phe Ser 275 280 285

932

Thr Ser Pro Glu Ser Pro Tyr Thr His Trp Lys Gln Thr Val Phe Tyr Met Glu Asp Tyr Leu Thr Val Lys Thr Gly Glu Glu Ile Phe Gly Thr 310 315 Ile Gly Met Arg Pro Asn Ala Lys Asn Asn Arg Asp Leu Asp Phe Thr 330 Ile Asp Leu Asp Phe Lys Gly Gln Leu Cys Glu Leu Ser Cys Ser Thr 345 Asp Tyr Arg Met Arg 355 <210> 971 <211> 176 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (11) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (176) <223> Xaa equals any of the naturally occurring L-amino acids <400> 971 Gly Val Pro Arg Arg Ala Tyr Gln Ala Xaa Xaa Leu Arg Arg Val Asp 1 Asp Phe Lys Lys Ala Phe Ser Lys Glu Lys Met Glu Lys Thr Lys Val Arg Thr Arg Glu Asn Leu Glu Lys Thr Arg Leu Lys Thr Lys Glu Asn 35 40 Leu Glu Lys Thr Arg His Thr Leu Glu Lys Arg Met Asn Lys Leu Gly

55

60

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933

Thr Arg Leu Val Pro Ala Glu Arg Arg Glu Lys Leu Lys Thr Ser Arg 65 70 75 80

Asp Lys Leu Arg Lys Ser Phe Thr Pro Asp His Val Val Tyr Ala Arg 85 90 95

Ser Lys Thr Ala Val Tyr Lys Val Pro Pro Phe Thr Phe His Val Lys 100 105 110

Lys Ile Arg Glu Gly Gln Val Glu Val Leu Lys Ala Thr Glu Met Val 115 120 125

Glu Val Gly Ala Asp Asp Asp Glu Gly Gly Ala Glu Arg Gly Glu Ala 130 135 140

Gly Asp Leu Arg Arg Gly Ser Ser Pro Asp Val His Ala Leu Leu Glu 145 150 155 160

Ile Thr Glu Glu Ser Asp Ala Val Leu Val Asp Lys Ser Asp Ser Xaa 165 170 175

<210> 972

<211> 159

<212> PRT

<213> Homo sapiens

<400> 972

Gly Lys Ala Arg Arg Arg Ala Ala Lys Leu Gln Ser Ser Gln Glu Pro 1 5 10 15

Glu Ala Pro Pro Pro Arg Asp Val Ala Leu Leu Gln Gly Arg Ala Asn 20 25 30

Asp Leu Val Lys Tyr Leu Leu Ala Lys Asp Gln Thr Lys Ile Pro Ile 35 40 45

Lys Arg Ser Asp Met Leu Lys Asp Ile Ile Lys Glu Tyr Thr Asp Val 50 55

Tyr Pro Glu Ile Ile Glu Arg Ala Gly Tyr Ser Leu Glu Lys Val Phe 65 70 75 80

Gly Ile Gln Leu Lys Glu Ile Asp Lys Asn Asp His Leu Tyr Ile Leu 85 90 95

Leu Ser Thr Leu Glu Pro Thr Asp Ala Gly Ile Leu Gly Thr Thr Lys

934

100 105 110

Asp Ser Pro Lys Leu Gly Leu Leu Met Val Leu Leu Ser Ile Ile Phe 120

Met Asn Gly Asn Arg Ser Ser Glu Ala Val Ile Trp Glu Val Leu Arg 135

Lys Leu Gly Leu Arg Leu Gly Tyr Ile Ile His Ser Leu Gly Thr 150

<210> 973

<211> 233

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

Arg Ala Xaa Lys Ala Ala Pro Arg Arg Ala Leu Ala Arg Leu Val Leu

Ala Trp Cys Arg Trp Leu Val Ser Ala Thr Cys Val Gly Thr Ala Asp

Arg Lys Met Ser Ser Gly Asn Ala Lys Ile Gly His Pro Ala Pro Asn

Phe Lys Ala Thr Ala Val Met Pro Asp Gly Gln Phe Lys Asp Ile Ser 55

Leu Ser Asp Tyr Lys Gly Lys Tyr Val Val Phe Phe Phe Tyr Pro Leu

Asp Phe Thr Phe Val Cys Pro Thr Glu Ile Ile Ala Phe Ser Asp Arg 85

Ala Glu Glu Phe Lys Lys Leu Asn Cys Gln Val Ile Gly Ala Ser Val 105

Asp Ser His Phe Cys His Leu Ala Trp Val Asn Thr Pro Lys Lys Gln 115 120

Gly Gly Leu Gly Pro Met Asn Ile Pro Leu Val Ser Asp Pro Lys Arg 130 135 140

Thr Ile Ala Gln Asp Tyr Gly Val Leu Lys Ala Asp Glu Gly Ile Ser 145 150 155 160

Phe Arg Gly Leu Phe Ile Ile Asp Asp Lys Gly Ile Leu Arg Gln Ile 165 170 175

Thr Val Asn Asp Leu Pro Val Gly Arg Ser Val Asp Glu Thr Leu Arg 180 185 190

Leu Val Gln Ala Phe Gln Phe Thr Asp Lys His Gly Glu Val Cys Pro

Ala Gly Trp Lys Pro Gly Ser Asp Thr Ile Lys Pro Asp Val Gln Lys 210 215 220

Ser Lys Glu Tyr Phe Ser Lys Gln Lys 225 230

<210> 974

<211> 174

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (37)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 974

Ser Trp Asp Arg Arg Leu Met Gln Asp Asp Asn Arg Gly Leu Gly Gln
1 10 15

Gly Leu Lys Asp Asn Lys Arg Thr Cys Asn Arg Phe Arg Leu Leu Leu 20 25 30

Glu Arg Arg Thr Xaa Gly Ser Glu Val Gln Asp Ser His Ser Thr Ser 35 40 45

Tyr Pro Ser Leu Leu Ser His Leu Thr Ser Met Tyr Leu Asn Ala Pro 50 55 60

Ala Leu Ala Leu Pro Val Ala Arg Met Gln Leu Pro Gly Pro Gly Leu 65 70 75 80

Arg Ser Phe His Pro Leu Ala Ser Ser Leu Pro Cys Asp Phe His Leu 85 90 95

Leu Asn Leu Arg Thr Leu Gln Ala Glu Glu Asp Thr Leu Pro Ser Ala
100 105 110

Glu Thr Ala Leu Ile Leu His Arg Lys Val Leu Thr Ala Ala Trp Arg 115 120 125

Gln Glu Leu Gly Leu Gln Leu His His Lys Pro Arg Gln Gly Ser Pro 130 135 140

Gly Gln Pro Phe Pro Trp Pro Gly Cys Gly Ile Pro Ser Ala Asn Leu 145 150 155 160

Leu Asp Val Thr Val Pro Ser Gly Leu Pro Val Gln Gln His 165 170

<210> 975

<211> 380

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (134)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 975

Arg Pro Glu Val Arg His Ser Arg Glu Ala Pro Glu Ser Arg Arg Trp 1 5 10 15

Ala Val Trp Arg Ser Leu Glu Ser Leu Pro Arg His Gln Leu Leu Cys
20 25 30

Leu Pro Val Gly Ala Pro Pro Ala Pro Ala Met Leu Ser Ala Leu Ala 35 40 45

Arg Pro Ala Ser Ala Ala Leu Arg Arg Ser Phe Ser Thr Ser Ala Gln 50 55 60

Asn Asn Ala Lys Val Ala Val Leu Gly Ala Ser Gly Gly Ile Gly Gln 65 70 75 80

Pro Leu Ser Leu Leu Lys Asn Ser Pro Leu Val Ser Arg Leu Thr

Leu Tyr Asp Ile Ala His Thr Pro Gly Val Ala Ala Asp Leu Ser His

Ile Glu Thr Lys Ala Ala Val Lys Gly Tyr Leu Gly Pro Glu Gln Leu 115 120 125

Pro Asp Cys Leu Lys Xaa Cys Asp Val Val Val Ile Pro Ala Gly Val

937

	130					135					140				
Pro 145		Lys	Pro	Gly	Met 150		Arg	Asp	Asp	Leu 155	Phe	Asn	Thr	Asn	Ala 160
Thr	Ile	Val	Ala	Thr 165		Thr	Ala	Ala	Cys 170		Gln	His	Cys	Pro 175	Glu
Ala	Met	Ile	Cys 180	Val	Ile	Ala	Asn	Pro 185		Asn	Ser	Thr	Ile 190	Pro	Ile
Thr	Ala	Glu 195	Val	Phe	Lys	Lys	His 200	_	Val	Tyr	Asn	Pro 205	Asn	Lys	Ile
Phe	Gly 210	Val	Thr	Thr	Leu	Asp 215		Val	Arg	Ala	Asn 220	Thr	Phe	Val	Ala
G1u 225	Leu	Lys	Gly	Leu	Asp 230	Pro	Ala	Arg	Val	Asn 235	Val	Pro	Val	Ile	Gly 240
Gly	His	Ala	Gly	Lys 245	Thr	Ile	Ile	Pro	Leu 250	Ile	Ser	Gln	Cys	Thr 255	Pro
Lys	Val	Asp	Phe 260	Pro	Gln	Asp	Gln	Leu 265	Thr	Ala	Leu	Thr	Gly 270	Arg	Ile
Gln	Glu	Ala 275	Gly	Thr	Glu	Val	Val 280	Lys	Ala	Lys	Ala	Gly 285	Ala	Gly	Ser
Ala	Thr 290	Leu	Ser	Met	Ala	Tyr 295	Ala	Gly	Ala	Arg	Phe 300	Val	Phe	Ser	Leu
Val 305	Asp	Ala	Met	Asn	G1y 310	Lys	Glu	Gly	Val	Val 315	Glu	Cys	Ser	Phe	Val 320
Lys	Ser	Gln	Glu	Thr 325	Glu	Cys	Thr	Tyr	Phe 330	ser	Thr	Pro	Leu	Leu 335	Leu
Gly	Lys	Lys	Gly 340	Ile	Glu	Lys	Asn	Leu 345	Gly	Ile	Gly	Lys	Val 350	Ser	Ser
Phe	Glu	Glu 355	Lys	Met	Ile	Ser	Asp 360	Ala	Ile	Pro	Glu	Leu 365	ГÀЗ	Ala	Ser
Ile	Lys 370	Lys	Gly	Glu	Asp	Phe 375	Val	Lys	Thr	Leu	Lys 380				

<210> 976 <211> 269

938

<212> PRT <213> Homo sapiens

<400> 976

Ala Ala Leu Ser Gln Ile Thr Ile Ala Thr Pro Pro Ala Val Lys Gln

Thr Ile Ser Asn Ile Ser Gly Phe Asn Glu Thr Cys Leu Arg Trp Arg

Ser Ile Lys Thr Ala Asp Met Glu Glu Met Tyr Leu Phe His Ile Trp

Gly Gln Arg Trp Tyr Gln Lys Glu Phe Ala Gln Glu Met Thr Phe Asn 50 60

Ile Ser Ser Ser Ser Arg Asp Pro Glu Val Cys Leu Asp Leu Arg Pro 65 70 75 80

Gly Thr Asn Tyr Asn Val Ser Leu Arg Ala Leu Ser Ser Glu Leu Pro $85 \hspace{1cm} 90 \hspace{1cm} 95$

Val Val Ile Ser Leu Thr Thr Gln Ile Thr Glu Pro Pro Leu Pro Glu
100 105 110

Val Glu Phe Phe Thr Val His Arg Gly Pro Leu Pro Arg Leu Arg Leu 115 120 125

Arg Lys Ala Lys Glu Lys Asn Gly Pro Ile Ser Ser Tyr Gln Val Leu 130 135 140

Val Leu Pro Leu Ala Leu Gln Ser Thr Phe Ser Cys Asp Ser Glu Gly 145 150 150 165

Ala Ser Ser Phe Phe Ser Asn Ala Ser Asp Ala Asp Gly Tyr Val Ala 165 170 175

Ala Glu Leu Leu Ala Lys Asp Val Pro Asp Asp Ala Met Glu Ile Pro 180 185 190

Ile Gly Asp Arg Leu Tyr Tyr Gly Glu Tyr Tyr Asn Ala Pro Leu Lys 195 200 205

Arg Gly Ser Asp Tyr Cys Ile Ile Leu Arg Ile Thr Ser Glu Trp Asn 210 215 220

Lys Val Arg Arg His Ser Cys Ala Val Trp Ala Gln Val Lys Asp Ser 225 230 235 240

Ser Leu Met Leu Leu Gln Met Ala Gly Val Gly Leu Gly Ser Leu Ala 245 250 255 Val Val Ile Ile Leu Thr Phe Leu Ser Phe Ser Ala Val 260 265

<210> 977 <211> 477 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (471) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (473) <223> Xaa equals any of the naturally occurring L-amino acids Leu Phe Ser Pro Gln Val Glu Leu Thr Lys Ala Met Val Met Glu Lys 1.0 Pro Ser Pro Leu Leu Val Gly Arg Glu Phe Val Arg Gln Tyr Tyr Thr 25 Leu Leu Asn Gln Ala Pro Asp Met Leu His Arg Phe Tyr Gly Lys Asn Ser Ser Tyr Val His Gly Gly Leu Asp Ser Asn Gly Lys Pro Ala Asp Ala Val Tyr Gly Gln Lys Glu Ile His Arg Lys Val Met Ser Gln Asn 70 Phe Thr Asn Cys His Thr Lys Ile Arg His Val Asp Ala His Ala Thr 90 Leu Asn Asp Gly Val Val Val Gln Val Met Gly Leu Leu Ser Asn Asn Asn Gln Ala Leu Arg Arg Phe Met Gln Thr Phe Val Leu Ala Pro Glu Gly Ser Val Ala Asn Lys Phe Tyr Val His Asn Asp Ile Phe Arg Tyr 135 Gln Asp Glu Val Phe Gly Gly Phe Val Thr Glu Pro Gln Glu Glu Ser

155

Glu	Glu	Glu	Val	Glu 165	Glu	Pro	Glu	Glu	Arg 170		Gln	Thr	Pro	Glu 175	
Val	Pro	Asp	Asp 180		Gly	Thr	Phe	Tyr 185		Gln	Ala	Val	Val 190		Asn
Asp	Met	Glu 195		His	Leu	Glu	Glu 200	Pro	Val	Ala	Glu	Pro 205		Pro	Asp
Pro	Glu 210	Pro	Glu	Pro	Glu	Gln 215		Pro	Val	Ser	Glu 220		Gln	Glu	Glu
Lys 225	Pro	Glu	Pro	Val	Leu 230	Glu	Glu	Thr	Ala	Pro 235		Asp	Ala	Gln	Lys 240
Ser	Ser	Ser	Pro	Ala 245	Pro	Ala	Asp	Ile	Ala 250		Thr	Val	Gln	Glu 255	-
Leu	Arg	Thr	Phe 260	Ser	Trp	Ala	Ser	Val 265	Thr	Ser	Lys	Asn	Leu 270	Pro	Pro
Ser	Gly	Ala 275	Val	Pro	Val	Thr	Gly 280	Ile	Pro	Pro	His	Val 285	Val	Lys	Val
Pro	Ala 290	Ser	Gln	Pro	Arg	Pro 295	Glu	Ser	Lys	Pro	Glu 300	Ser	Gln	Ile	Pro
Pro 305	Gln	Arg	Pro	Gln	Arg 310	Asp	Gln	Arg	Val	Arg 315	Glu	Gln	Arg	Ile	Asn 320
Ile	Pro	Pro	Gln	Arg 325	Gly	Pro	Arg	Pro	11e 330	Arg	Glu	Ala	Gly	Glu 335	Gln
Gly	Asp	Ile	Glu 340	Pro	Arg	Arg	Met	Val 345	Arg	His	Pro	Asp	Ser 350	His	Gln
Leu	Phe	Ile 355	Gly	Asn	Leu	Pro	His 360	Glu	Val	Asp	Lys	Ser 365	Glu	Leu	Lys
Asp	Phe 370	Phe	Gln	Ser	Tyr	Gly 375	Asn	Val	Val	Glu	Leu 380	Arg	Ile	Asn	Ser
31y 385	Gly	Lys	Leu	Pro	Asn 390	Phe	Gly	Phe	Val	Val 395	Phe	Asp	Asp	Ser	Glu 400
Pro	Val	Gln	Lys	Val 405	Leu	Ser	Asn	Arg	Pro 410	Ile	Met	Phe	Arg	Gly 415	Glu
/al	Arg		Asn 420		Glu	Glu	_	Lys 425		Arg	Ala		Arg		Gly

Asp Arg Arg Asp Asn Arg Leu Arg Gly Pro Gly Gly Pro Arg Gly Gly 440 Leu Gly Gly Met Arg Gly Pro Pro Arg Gly Gly Met Val Gln Lys 450 455 460 Pro Gly Phe Gly Val Gly Xaa Gly Xaa Ala Pro Arg Gln 470 <210> 978 <211> 339 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (128) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (326) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (336) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (339) <223> Xaa equals any of the naturally occurring L-amino acids Pro Val Ala Ala Val Ser Gly Arg Ala Val Gly Gly Ser Arg Gly Gly Gly Arg Gly Gly Met Ala Ala Ala Ala Gly Ala Gly Ser Gly Pro 20 25 30 Trp Ala Ala Gln Glu Lys Gln Phe Pro Pro Ala Leu Leu Ser Phe Phe 40 Ile Tyr Asn Pro Arg Phe Gly Pro Arg Glu Gly Gln Glu Glu Asn Lys 50 55 60

Ile Leu Phe Tyr His Pro Asn Glu Val Glu Lys Asn Glu Lys Ile Arg

65					70					75					80
Asn	Val	Gly	Leu	Cys 85		Ala	Ile	Val	Gln 90		Thr	Arg	Thr	Phe 95	Ser
Pro	Ser	Lys	Pro 100	Ala	ГÀЗ	Ser	Leu	His 105	Thr	Gln	Lys	Asn	Arg 110	Gln	Phe
Phe	Asn	Glu 115	Pro	Glu	Glu	Asn	Phe 120	Trp	Met	Val	Met	Val 125	Val	Arg	Xaa
Pro	Ile 130	Ile	Glu	Lys	Gln	Ser 135	Lys	Asp	Gly	Lys	Pro 140	Val	Ile	Glu	Tyr
Gln 145	Glu	Glu	Glu	Leu	Leu 150	Asp	Lys	Val	туг	Ser 155	Ser	Val	Leu	Arg	Gln 160
Cys	Tyr	Ser	Met	Туг 165	Lys	Leu	Phe	Asn	Gly 170	Thr	Phe	Leu	Lys	Ala 175	Met
Glu	Asp	Gly	Gly 180	Val	Lys	Leu	Leu	Lys 185	Glu	Arg	Leu	Glu	Lys 190	Phe	Phe
His	Arg	Туг 195	Leu	Gln	Thr	Leu	His 200	Leu	Gln	Ser	Cys	Asp 205	Leu	Leu	Asp
Ile	Phe 210	Gly	Gly	·Ile	Ser	Phe 215	Phe	Pro	Leu	Asp	Lys 220	Met	Thr	Tyr	Leu
Lys 225	Ile	Gln	Ser	Phe	Ile 230	Asn	Arg	Met	Glu	Glu 235	Ser	Leu	Asn	Ile	Val 240
Lys	Tyr	Thr	Ala	Phe 245	Leu	Tyr	Asn	Asp	Gln 250	Leu	Ile	Trp	Ser	Gly 255	Leu
Glu	Gln	Asp	Asp 260	Met	Arg	Ile	Leu	Туг 265	Lys	Tyr	Leu	Thr	Thr 270	Ser	Leu
Phe	Pro	Arg 275	His	Ile	Glu	Pro	Glu 280	Leu	Ala	Gly	Arg	Asp 285	Ser	Pro	Ile
	Ala 290		Met	Pro	_	Asn 295		Gln	His		Gly 300		Phe	Leu	Thr
Gly 305	Pro	Leu	Asn	Leu	Asn 310	Asp	Pro	Asp	Ala	Lys 315	Cys	Arg	Phe	Pro	Lys 320
Ile	Phe	Va1	Asn	Thr 325	Xaa	Asp	Thr	Tyr	Glu 330	Glu	Leu	His	Leu	11e 335	Xaa

Tyr Lys Xaa

WO 00/55350

<210> 979 <211> 283 <212> PRT <213> Homo sapiens <400> 979 His Arg Glu Arg Arg Val Gly Leu Arg Cys Ala Arg Arg Thr Ser Glu Ala Ala Gly Ser Gly Ala Gly Pro Pro Gly Pro Leu Gln Gly Arg Ser Gly Ser Ser Trp Ala Pro Arg Pro Gly Arg Arg Thr Glu Glu Arg Arg 40 Lys Gly Ala Gly Gly Thr Arg Pro Arg Pro Ala Ala Ala Met Asn Ser Asn Val Glu Asn Leu Pro Pro His Ile Ile Arg Leu Val Tyr Lys Glu 70 Val Thr Thr Leu Thr Ala Asp Pro Pro Asp Gly Ile Lys Val Phe Pro 90 Asn Glu Glu Asp Leu Thr Asp Leu Gln Val Thr Ile Glu Gly Pro Glu 105 Gly Thr Pro Tyr Ala Gly Gly Leu Phe Arg Met Lys Leu Leu Leu Gly 120 Lys Asp Phe Pro Ala Ser Pro Pro Lys Gly Tyr Phe Leu Thr Lys Ile Phe His Pro Asn Val Gly Ala Asn Gly Glu Ile Cys Val Asn Val Leu 150 Lys Arg Asp Trp Thr Ala Glu Leu Gly Ile Arg His Val Leu Leu Thr Ile Lys Cys Leu Leu Ile His Pro Asn Pro Glu Ser Ala Leu Asn Glu Glu Ala Gly Arg Leu Leu Glu Asn Tyr Glu Glu Tyr Ala Ala Arg 200 Ala Arg Leu Leu Thr Glu Ile His Gly Gly Ala Gly Gly Pro Ser Gly 210 215

Arg Ala Glu Ala Gly Arg Ala Leu Ala Ser Gly Thr Glu Ala Ser Ser 225 230 230 235 240

Thr Asp Pro Gly Ala Pro Gly Gly Pro Gly Gly Ala Glu Gly Pro Met 245 250 255

Ala Lys Lys His Ala Gly Glu Arg Asp Lys Lys Leu Ala Ala Lys Lys 260 265 270

Lys Thr Asp Lys Lys Arg Ala Leu Arg Arg Leu 275 280

<210> 980

<211> 353

<212> PRT

<213> Homo sapiens

<220>

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<222> (333)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (346)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 980

Arg Lys Gln Cys Gln Asp Ser Lys Asp Ser Asn His Leu Pro Lys Met

1 5 10 15

Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly Gly Thr Ser 20 25 30

Gly Gln Tyr Tyr Asp Tyr Asp Phe Pro Leu Ser Ile Tyr Gly Gln Ser 35 40 45

Ser Pro Asn Cys Ala Pro Glu Cys Asn Cys Pro Glu Ser Tyr Pro Ser 50 55 60

Ala Met Tyr Cys Asp Glu Leu Lys Leu Lys Ser Val Pro Met Val Pro 65 70 75 80

Pro Gly Ile Lys Tyr Leu Tyr Leu Arg Asn Asn Gln Ile Asp His Ile 85 90 95

Asp Glu Lys Ala Phe Glu Asn Val Thr Asp Leu Gln Trp Leu Ile Leu 100 105 110

945

Asp His Asn Leu Leu Glu Asn Ser Lys Ile Lys Gly Arg Val Phe Ser 120 Lys Leu Lys Gln Leu Lys Lys Leu His Ile Asn His Asn Asn Leu Thr 135 Glu Ser Val Gly Pro Leu Pro Lys Ser Leu Glu Asp Leu Gln Leu Thr 150 155 His Asn Lys Ile Thr Lys Leu Gly Ser Phe Glu Gly Leu Val Asn Leu Thr Phe Ile His Leu Gln His Asn Arg Leu Lys Glu Asp Ala Val Ser 185 Ala Ala Phe Lys Gly Leu Lys Ser Leu Glu Tyr Leu Asp Leu Ser Phe 200 Asn Gln Ile Ala Arg Leu Pro Ser Gly Leu Pro Val Ser Leu Leu Thr 215 Leu Tyr Leu Asp Asn Asn Lys Ile Ser Asn Ile Pro Asp Glu Tyr Phe 235 230 Lys Arg Phe Asn Ala Leu Gln Tyr Leu Arg Leu Ser His Asn Glu Leu 250 Ala Asp Ser Gly Ile Pro Gly Asn Ser Phe Asn Val Ser Ser Leu Val 265 Glu Leu Asp Leu Ser Tyr Asn Lys Leu Lys Asn Ile Pro Thr Val Asn 280 Glu Asn Leu Glu Asn Tyr Tyr Leu Glu Val Asn Gln Leu Glu Lys Phe Asp Ile Lys Ser Phe Cys Lys Ile Leu Gly Pro Leu Ser Tyr Ser Lys Ile Lys His Leu Arg Leu Asp Gly Asn Arg Ile Ser Xaa Thr Ser Leu 330 Pro Pro Asp Met Tyr Glu Cys Leu Arg Xaa Ala Asn Glu Val Thr Leu 345 350 340

Asn

<21 <21	.0> 9 .1> 3 .2> F	43 RT	sapi	.ens											
<22	1> S 2> (343)	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds
			· Lys	Asn 5		Thr	Ala	Leu	Ser 10		Glu	Asn	Cys	Ser 15	
Gln	Tyr	Gln	Leu 20	_	Gln	Thr	Asn	Gln 25		Leu	Asp	Val	Asn 30	Tyr	Leu
Leu	Phe	Leu 35	Ile	Ile	Leu	Gly	Lys 40	Ile	Leu	Leu	Asn	Ile 45		Thr	Leu
Gly	Met 50	_	Arg	Lys	Asn	Thr 55	Cys	Gln	Asn	Phe	Met 60	Glu	Tyr	Phe	Cys
Ile 65	Ser	Leu	Ala	Phe	Val	Asp	Leu	Leu	Leu	Leu 75	Va1	Asn	Ile	Ser	Ile 80
Ile	Leu	Tyr	Phe	Arg 85	Asp	Phe	Val	Leu	Leu 90	Ser	Ile	Arg	Phe	Thr 95	Lys
Tyr	His	Ile	Cys 100	Leu	Phe	Thr	Gln	Ile 105	Ile	Ser	Phe	Thr	Tyr 110	Gly	Phe
Leu	His	туг 115	Pro	Val	Phe	Leu	Thr 120	Ala	Cys	Ile	Asp	Tyr 125	Cys	Leu	Asn
Phe	Ser 130	Lys	Thr	Thr	Lys	Leu 135	Ser	Phe	Lys	Суз	Gln 140	Lys	Leu	Phe	Tyr
Phe	Phe	Thr	Val	Ile	Leu 150	Ile	Trp	Ile	Ser	Val 155	Leu	Ala	Tyr	Val	Leu 160
Gly	Asp	Pro	Ala	Ile 165	Tyr	Gln	Ser	Leu	Lys 170	Ala	Gln	Asn	Ala	Туг 175	Ser
Arg	His	Cys	Pro 180	Phe	Tyr	Val	Ser	Ile 185	Gln	Ser	Tyr	Trp	Leu 190	Ser	Phe
Phe	Met	Val 195	Met	Ile	Leu	Phe	Val 200	Ala	Phe	Ile	Thr	Cys 205	Trp	Glu	Glu
Val	Thr	Thr	Leu	Val	G1n	Ala	Ile	Arg	Ile	Thr	Ser	Tyr	Met	Asn	Glu

210 215 220 Thr Ile Leu Tyr Phe Pro Phe Ser Ser His Ser Ser Tyr Thr Val Arg 225 230 235 Ser Lys Lys Ile Phe Leu Ser Lys Leu Ile Val Cys Phe Leu Ser Thr Trp Leu Pro Phe Val Leu Leu Gln Val Ile Ile Val Leu Leu Lys Val 260 265 Gln Ile Pro Ala Tyr Ile Glu Met Asn Ile Pro Trp Leu Tyr Phe Val 280 Asn Ser Phe Leu Ile Ala Thr Val Tyr Trp Phe Asn Cys His Lys Leu 295 Asn Leu Lys Asp Ile Gly Leu Pro Leu Asp Pro Phe Val Asn Trp Lys Cys Cys Phe Ile Pro Leu Thr Ile Pro Asn Leu Glu Gln Ile Glu Lys 330 Pro Ile Ser Ile Met Ile Xaa 340 <210> 982 <211> 142 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (108) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (111) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (114) <223> Xaa equals any of the naturally occurring L-amino acids <220>

<221> SITE <222> (121)

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<220>
<221> SITE
<222> (122)
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<220>
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<222> (126)
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<220>
<221> SITE
<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (132)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 982
Gly Leu Pro Pro Ser Thr Phe Leu His Ser Ala Val Ser Thr Leu Pro
                                    10
His Arg Pro Ser Pro Pro Ser Leu Leu Pro Ala Pro Cys Lys Pro Leu
                                 25
Arg Leu Gly Leu Ala Thr Val Pro Ala Gly Ser Pro Gly Leu Gly Val
                            40
Gly Asp Ser Leu Gln Ala Arg Ser Pro Glu Thr Ser Glu Gly His Pro
Leu Arg Val Ala Arg Pro Pro Val Ala Asn Leu Ser Ala Ala Ser Ala
 65
                                         75
                     70
Thr Ser Pro Ala Gly Pro Trp Phe Arg Trp Pro Pro Arg Cys Leu Ala
Glu Thr Arg His Gly Pro Ser Ala Gly Pro His Xaa Phe Pro Xaa Pro
                                105
                                                   110
Gly Xaa Trp His Cys Ser Arg Gln Xaa Xaa Gly His Gln Xaa Xaa Asn
Arg Thr Gln Xaa Pro Ala Gln Thr Ala Ala Gly Met Gly Ala
    130
                       135
                                            140
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<210> 983 <211> 193 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (72) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (135) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (139) <223> Xaa equals any of the naturally occurring L-amino acids Val Asn Phe Lys Ala Phe Glu Met Gly Lys Asp Tyr Tyr Cys Ile Leu Gly Ile Glu Lys Gly Ala Ser Asp Glu Asp Ile Lys Lys Ala Tyr Arg 25 Lys Gln Ala Leu Lys Phe His Pro Asp Lys Asn Lys Ser Pro Gln Ala Glu Glu Lys Phe Lys Glu Val Ala Glu Ala Tyr Glu Val Leu Ser Asp Pro Lys Lys Arg Glu Ile Tyr Xaa Gln Phe Gly Glu Glu Gly Leu Lys 70 Gly Gly Ala Gly Gly Thr Asp Gly Gln Gly Gly Thr Phe Arg Tyr Thr 90 85 Phe His Gly Asp Pro His Ala Thr Phe Ala Ala Phe Phe Gly Gly Ser Asn Pro Phe Glu Ile Phe Phe Gly Arg Arg Met Gly Gly Arg Asp . 120 Ser Glu Glu Met Glu Ile Xaa Gly Asp Pro Xaa Ser Ala Phe Gly Phe 135 Ser Met Asn Gly Tyr Pro Arg Asp Arg Asn Ser Val Gly Pro Ser Arg 155 145 150

Leu Lys Gln Asp Pro Pro Val Ile His Glu Leu Arg Val Ser Leu Glu $165 \hspace{1.5cm} 170 \hspace{1.5cm} 175$

Glu Ile Tyr Ser Gly Cys Thr Lys Arg Asp Glu Arg Phe Leu Glu Lys 180 185 190

Gly

<210> 984

<211> 402

<212> PRT

<213> Homo sapiens

<400> 984

Lys Ser Tyr Glu Met Glu Leu Glu Glu Gly Lys Ala Gly Ser Gly Leu
1 5 10 15

Arg Gln Tyr Tyr Leu Ser Lys Ile Glu Glu Leu Gln Leu Ile Val Asn 20 25 30

Asp Lys Ser Gln Asn Leu Arg Arg Leu Gln Ala Gln Arg Asn Glu Leu 35 40 45

Asn Ala Lys Val Arg Leu Leu Arg Glu Glu Leu Gln Leu Leu Gln Glu 50 55 60

Gln Gly Ser Tyr Val Gly Glu Val Val Arg Ala Met Asp Lys Lys 65 70 75 80

Val Leu Val Lys Val His Pro Glu Gly Lys Phe Val Val Asp Val Asp 85 90 95

Lys Asn Ile Asp Ile Asn Asp Val Thr Pro Asn Cys Arg Val Ala Leu 100 105 110

Arg Asn Asp Ser Tyr Thr Leu His Lys Ile Leu Pro Asn Lys Val Asp 115 120 125

Pro Leu Val Ser Leu Met Met Val Glu Lys Val Pro Asp Ser Thr Tyr 130 135 140

Glu Met Ile Gly Gly Leu Asp Lys Gln Ile Lys Glu Ile Lys Glu Val 145 150 155 160

Ile Glu Leu Pro Val Lys His Pro Glu Leu Phe Glu Ala Leu Gly Ile 165 170 175

Ala Gln Pro Lys Gly Val Leu Leu Tyr Gly Pro Pro Gly Thr Gly Lys 180 185 190

Thr Leu Leu Ala Arg Ala Val Ala His His Thr Asp Cys Thr Phe Ile 195 200 205

Arg Val Ser Gly Ser Glu Leu Val Gln Lys Phe Ile Gly Glu Gly Ala 210 215 220

Arg Met Val Arg Glu Leu Phe Val Met Ala Arg Glu His Ala Pro Ser 225 230 235 240

Ile Ile Phe Met Asp Glu Ile Asp Ser Ile Gly Ser Ser Arg Leu Glu 245 250 255

Gly Gly Ser Gly Gly Asp Ser Glu Val Gln Arg Thr Met Leu Glu Leu 260 265 270

Leu Asn Gln Leu Asp Gly Phe Glu Ala Thr Lys Asn Ile Lys Val Ile 275 280 285

Met Ala Thr Asn Arg Ile Asp Ile Leu Asp Ser Ala Leu Leu Arg Pro 290 295 300

Gly Arg Ile Asp Arg Lys Ile Glu Phe Pro Pro Pro Asn Glu Glu Ala 305 310 315 320

Arg Leu Asp Ile Leu Lys Ile His Ser Arg Lys Met Asn Leu Thr Arg 325 330 335

Gly Ile Asn Leu Arg Lys Ile Ala Glu Leu Met Pro Gly Ala Ser Gly $340 \hspace{1cm} 345 \hspace{1cm} 350$

Ala Glu Val Lys Gly Val Cys Thr Glu Ala Gly Met Tyr Ala Leu Arg 355 360 365

Glu Arg Arg Val His Val Thr Gln Glu Asp Phe Glu Met Ala Val Ala 370 375 380

Lys Val Met Gln Lys Asp Ser Glu Lys Asn Met Ser Ile Lys Lys Leu 385 390 395 400

Trp Lys

<210> 985

<211> 347

<212> PRT

<213> Homo sapiens

<40	0> 9	85													
Arg 1	Arg	Arg	Arg	Trp 5		Pro	Gly	Pro	Gly 10	_	Pro	Arg	Arg	Thr 15	Alá
Gly	Lys	Gly	Pro 20	Arg	Lys	Val	Ala	Ser 25	Ala	Ser	Ala	Ala	Ala 30	Ser	Thi
Leu	Ser	Glu 35	Pro	Pro	Arg	Arg	Thr 40	Gln	Glu	Ser	Arg	Thr 45	Arg	Thr	Arç
Ala	Leu 50	Gly	Leu	Pro	Thr	Leu 55	Pro	Met	Glu	Lys	Leu 60	Ala	Ala	Ser	Thi
Glu 65	Pro	Gln	Gly	Pro	Arg 70	Pro	Val	Leu	Gly	Arg 75	Glu	Ser	Val	Gln	Va] 80
Pro	Asp	Asp	Gln	Asp 85	Phe	Arg	Ser	Phe	Arg 90	Ser	Glu	Cys	Glu	Ala 95	Glu
Val	Gly	Trp	Asn 100	Leu	Thr	Tyr	Ser	Arg 105	Ala	Gly	Val	Ser	Val 110	Trp	Val
Gln	Ala	Val 115	Glu	Met	Asp	Arg	Thr 120	Leu	His	Lys	Ile	Lys 125	Cys	Arg	Met
Glu	Cys 130	Cys	Asp	Val	Pro	Ala 135	Glu	Thr	Leu	Tyr	Asp 140	Val	Leu	His	Asp
Ile 145	Glu	Tyr	Arg	Lys	Lys 150	Trp	Asp	Ser	Asn	Val 155	Ile	Glu	Thr	Phe	Asp 160
Ile	Ala	Arg	Leu	Thr 165	Val	Asn	Ala	Asp	Val 170	Gly	Tyr	Tyr	Ser	Trp 175	Arg
Сув	Pro	Lys	Pro 180	Leu	Lys	Asn	Arg	Asp 185	Val	Ile	Thr	Leu	Arg 190	Ser	Trp
Leu	Pro	Met 195	Gly	Ala	Asp	Tyr	Ile 200	Ile	Met	Asn	Tyr	Ser 205	Val	Lys	His
Pro	Lys 210	Tyr	Pro	Pro	Arg	Lys 215	Asp	Leu	Val	Arg	Ala 220	Val	Ser	Ile	Gln
Thr 225	Gly	Tyr	Leu	Ile	Gln 230	Ser	Thr	Gly	Pro	Lys 235	Ser	Cys	Val	Ile	Thr 240

Tyr Leu Ala Gln Val Asp Pro Lys Gly Ser Leu Pro Lys Trp Val Val

Asn Lys Ser Ser Gln Phe Leu Ala Pro Lys Ala Met Lys Lys Met Tyr

250

. *

270 260 265 Lys Ala Cys Leu Lys Tyr Pro Glu Trp Lys Gln Lys His Leu Pro His 280 Phe Lys Pro Trp Leu His Pro Glu Gln Ser Pro Leu Pro Ser Leu Ala 295 Leu Ser Glu Leu Ser Val Gln His Ala Asp Ser Leu Glu Asn Ile Asp Glu Ser Ala Val Ala Glu Ser Arg Glu Glu Arg Met Gly Gly Ala Gly 330 Gly Glu Gly Ser Asp Asp Asp Thr Ser Leu Thr 340 345 <210> 986 <211> 106 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (36) <223> Xaa equals any of the naturally occurring L-amino acids <400> 986 Ala Ser Ile Cys Ala Asp Ala Lys Leu Trp Thr Met Tyr Ala Arg Pro Ser Asn Arg Gln Arg Cys Leu Gly Ser Lys His Thr Glu Arg Thr Trp Thr Ala Trp Xaa Arg Ser Leu Ile Arg Pro Phe Ser Met His Ile Leu Pro Lys Gln Ser Gln Ile Pro Leu Lys Gly Ala Asp Ser Ile Ser Ser 50 55 60 Ser Val Gln Thr Leu Arg Ala Glu Arg Ser Gly Ser Gly Ser His Val 70 Thr Ala Gln Asn Asn Leu Arg Asn Pro Leu Cys Pro Glu Gly Ser Leu 90 85 Thr Ser Pro Ser Gly Ser Glu Gln Ser Leu

<210> 987 <211> 172 <212> PRT <213> Homo sapiens <400> 987 Thr Pro Arg Gly Ala Val Lys Pro Ser Ala Asn Lys Tyr Pro Ile Phe Phe Phe Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe 25 Pro Tyr Lys Glu Tyr Lys Asp Lys Phe Gly Lys Ser Asn Lys Arg Lys Gly Phe Asn Glu Gly Leu Trp Glu Ile Glu Asn Asn Pro Gly Val Lys 55 Phe Thr Gly Tyr Gln Ala Ile Gln Gln Gln Ser Ser Ser Glu Thr Glu Gly Glu Gly Asn Thr Ala Asp Ala Ser Ser Glu Glu Glu Gly Asp Arg Val Glu Glu Asp Gly Lys Gly Lys Arg Lys Asn Glu Lys Ala Gly 105 Ser Lys Arg Lys Lys Ser Tyr Thr Ser Lys Lys Ser Ser Lys Gln Ser 120 Arg Lys Ser Pro Gly Asp Glu Asp Asp Lys Asp Cys Lys Glu Glu Glu Asn Lys Ser Ser Ser Glu Gly Gly Asp Ala Gly Asn Asp Thr Arg Asn

Thr Thr Ser Asp Leu Gln Lys Thr Ser Glu Gly Thr

170

165

<210> 988 <211> 238 · <212> PRT <213> Homo sapiens <220> <221> SITE <222> (101) <223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (146)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 988

Ala Lys Gln Asp Pro Val Pro Glu Gln Glu Met Ser Pro Ser Ile Ser 1 5 10 15

Asp Pro Cys Leu Gly Gln Ala Leu Met Gly Gly Pro Ser Phe Lys Ala 20 25 30

Val Val Gly Thr Ala Pro Pro Asn Ala Ser Leu Ser Phe Leu Pro Ile 35 40 45

His Gln Tyr Thr Ala Gly Pro Phe Leu Val Phe Val Gln Gln Glu Thr 50 60

His Phe Trp Trp Asp Met Pro Ser Ser Ala Thr Gly Pro Leu Thr Pro 65 70 75 80

Cys Ile Ser Val Leu Pro Val Ser Ala Gly Thr Asp Ser Lys Gly Lys 85 90 95

Pro Ser Val Trp Xaa Ile Gly Gly Trp Glu Gln Arg Gly Glu Asn Ala

Val Leu Ser Phe Cys Leu Gly Ile Pro His Thr Thr Trp Val Leu Pro 115 120 125

Gly Lys Pro Val Leu Ser Lys Thr Met Asp Leu Ala Ser Pro Thr Gly

Leu Xaa Ser Gln His Leu Arg Glu Gly Gly Trp Lys Arg Leu Cys Pro 145 150 150 160

His Phe Glu Leu Gln Ala Gly Ser Ala Ala Leu Lys Pro Ser Ser Asp 165 170 175

Phe Leu Thr Gln Asp Pro Ala Pro Gly Arg Arg Arg Val Gly Ala Gly 180 185 190

Leu Val Gly Gln Lys Glu Ala Ser Ala Gly Leu Glu Asp Pro Ser Ser 195 200 205

Thr Ser His Ser Val Ser Ser Ser Trp Glu Asn Leu Cys Gln Ala Arg 210 215 220

Ala Val Ile Gly Pro His Glu Val Ser Glu Ala Pro Ser Trp

WO 00/55350

956

225 230 235

<210> 989

<211> 74

<212> PRT

<213> Homo sapiens

<400> 989

Ser Leu Ile Lys Ala Leu Tyr Ile Leu Tyr Gly Phe Arg His His His $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Thr Lys Lys Leu Thr Pro Ser Ile Pro Val Phe Val Gly Gln Ala Ser 20 25 30

Phe Phe Ser Pro Cys Ser Val Ser His Thr Val Cys Leu Gln Lys Leu 35 40 45

Leu Ile Gly Ala Lys Tyr Asn Cys Gln Tyr Asn Leu Lys Thr Thr Met 50 60

Cys Pro Arg Arg Pro Thr Cys Leu Phe Pro

<210> 990

<211> 295

<212> PRT

<213> Homo sapiens

<400> 990

Ala Pro Ala Arg Pro Gly Ser Leu Pro Ser Thr Arg Ser Ala Pro Leu $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Val Pro Ser Ser Arg Arg Pro Ala Glu Ser Pro Leu Arg Ser Arg 20 25 30

Arg Cys Arg Gly Asp Met Val Leu Cys Val Gln Gly Pro Arg Pro Leu 35 40 45

Leu Ala Val Glu Arg Thr Gly Gln Arg Pro Leu Trp Ala Pro Ser Leu
50 55 60

Glu Leu Pro Lys Pro Val Met Gln Pro Leu Pro Ala Gly Ala Phe Leu 65 70 75 80

Glu Glu Val Ala Glu Gly Thr Pro Ala Gln Thr Glu Ser Glu Pro Lys
85 90 95

957

Val Leu Asp Pro Glu Glu Asp Leu Leu Cys Ile Ala Lys Thr Phe Ser 100 105 110

Tyr Leu Arg Glu Ser Gly Trp Tyr Trp Gly Ser Ile Thr Ala Ser Glu 115 120 125

Ala Arg Gln His Leu Gln Lys Met Pro Glu Gly Thr Phe Leu Val Arg 130 135 140

Asp Ser Thr His Pro Ser Tyr Leu Phe Thr Leu Ser Val Lys Thr Thr 145 150 150 160

Arg Gly Pro Thr Asn Val Arg Ile Glu Tyr Ala Asp Ser Ser Phe Arg 165 170 175

Leu Asp Ser Asn Cys Leu Ser Arg Pro Arg Ile Leu Ala Phe Pro Asp 180 185 190

Val Val Ser Leu Val Gln His Tyr Val Ala Ser Cys Thr Ala Asp Thr 195 200 205

Arg Ser Asp Ser Pro Asp Pro Ala Pro Thr Pro Ala Leu Pro Met Pro 210 215 . 220

Lys Glu Asp Ala Pro Ser Asp Pro Ala Leu Pro Ala Pro Pro Pro Ala 225 230 230 235 240

Thr Ala Val His Leu Lys Leu Val Gln Pro Phe Val Arg Arg Ser Ser 245 250 255

Ala Arg Ser Leu Gln His Leu Cys Arg Leu Val Ile Asn Arg Leu Val
260 265 270

Ala Asp Val Asp Cys Leu Pro Leu Pro Arg Arg Met Ala Asp Tyr Leu 275 280 285

Arg Gln Tyr Pro Phe Gln Leu 290 295

<210> 991

<211> 58

<212> PRT

<213> Homo sapiens

<400> 991

Leu His Lys Val Ser Ile Leu Leu Tyr Ser Ala Val Leu Val Ser Phe

Ser Cys Ile Gly Phe His Cys Ile Tyr Ser Leu Phe Met Leu Asn Leu

20 25 30

Ala Lys Asp Glu His Cys Pro Pro Leu Lys Cys Leu Cys His Phe Glu
35 40 45

Phe Cys Ala Asn Phe Val Ala Arg Met Arg 50 55

<210> 992

<211> 203

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 992

Ala His Ala Ser Pro Thr Arg Xaa Glu Ala Arg Val Val Val Val Arg 1 5 10 15

Cys Leu Pro Ala Cys Val Arg Asp Leu Pro Asp Ser Val Ala Ala Met
20 25 30

Ala Ser Asp Glu Gly Lys Leu Phe Val Gly Gly Leu Ser Phe Asp Thr 35 40 45

Asn Glu Gln Ser Leu Glu Gln Val Phe Ser Lys Tyr Gly Gln Ile Ser 50 55 60

Glu Val Val Val Lys Asp Arg Glu Thr Gln Arg Ser Arg Gly Phe 65 70 75 80

Gly Phe Val Thr Phe Glu Asn Ile Asp Asp Ala Lys Asp Ala Met Met 85 90 95

Ala Met Asn Gly Lys Ser Val Asp Gly Arg Gln Ile Arg Val Asp Gln 100 105 110

Ala Gly Lys Ser Ser Asp Asn Arg Ser Arg Gly Tyr Arg Gly Gly Ser

Ala Gly Gly Arg Gly Phe Phe Arg Gly Gly Arg Gly Arg Gly Arg Gly 130 135 . 140

Phe Ser Arg Gly Gly Gly Asp Arg Gly Tyr Gly Gly Asn Arg Phe Glu 145 150 155 160

Ser Arg Ser Gly Gly Tyr Gly Gly Ser Arg Asp Tyr Tyr Ser Ser Arg 165 170 175

Ser Gln Ser Gly Gly Tyr Ser Asp Arg Ser Ser Gly Gly Ser Tyr Arg 180 185 190

Asp Ser Tyr Asp Ser Tyr Ala Thr His Asn Glu 195 200

<210> 993

WO 00/55350

<211> 252

<212> PRT

<213> Homo sapiens

<400> 993

Gly Gly Leu Ala Trp Arg Ala Leu Arg Thr Ser Gly Thr Leu Leu Arg
1 5 10 15

Val Glu Arg Leu Leu Glu Asp Tyr Cys Pro Glu Glu Lys Met Phe 20 25 30

Gly Phe His Lys Pro Lys Met Tyr Arg Ser Ile Glu Gly Cys Cys Ile 35 40 45

Cys Arg Ala Lys Ser Ser Ser Ser Arg Phe Thr Asp Ser Lys Arg Tyr 50 55 60

Glu Lys Asp Phe Gln Ser Cys Phe Gly Leu His Glu Thr Arg Ser Gly
65 70 75 80

Asp Ile Cys Asn Ala Cys Val Leu Leu Val Lys Arg Trp Lys Lys Leu
85 90 95

Pro Ala Gly Ser Lys Lys Asn Trp Asn His Val Val Asp Ala Arg Ala 100 105 110

Gly Pro Ser Leu Lys Thr Thr Leu Lys Pro Lys Lys Val Lys Thr Leu 115 120 125

Ser Gly Asn Arg Ile Lys Ser Asn Gln Ile Ser Lys Leu Gln Lys Glu 130 135 140

Phe Lys Arg His Asn Ser Asp Ala His Ser Thr Thr Ser Ser Ala Ser 145 150 155 160

Pro Ala Gln Ser Pro Cys Tyr Ser Asn Gln Ser Asp Asp Gly Ser Asp

Thr Glu Met Ala Ser Gly Ser Asn Arg Thr Pro Val Phe Ser Phe Leu

185 190 Asp Leu Thr Tyr Trp Lys Arg Gln Lys Ile Cys Cys Gly Ile Ile Tyr 200 Lys Gly Arg Phe Gly Glu Val Leu Ile Asp Thr His Leu Phe Lys Pro Cys Cys Ser Asn Lys Lys Ala Ala Ala Glu Lys Pro Glu Glu Gln Gly 235 230 Gln Ser Leu Cys Pro Ser Pro Leu Arg Ser Gly Asp 245 <210> 994 <211> 170 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (5) <223> Xaa equals any of the naturally occurring L-amino acids <400> 994 Arg Thr Arg Gly Xaa Asp Thr Gln Pro Thr Val Cys Thr Asp Ala Pro 10 Ser Leu Leu Pro Leu Ser Arg Leu His Leu Arg Gly Ser Trp Asp Arg 25 Arg Ser Val Ala Asn Met Gln Leu Phe Val Arg Ala Gln Glu Leu His Thr Phe Glu Val Thr Gly Gln Glu Thr Val Ala Gln Ile Lys Ala His Val Ala Ser Leu Glu Gly Ile Ala Pro Glu Asp Gln Val Val Leu Leu Ala Gly Ala Pro Leu Glu Asp Glu Ala Thr Leu Gly Gln Cys Gly Val Glu Ala Leu Thr Thr Leu Glu Val Ala Gly Arg Met Leu Gly Gly Lys 105

Val His Gly Ser Leu Ala Arg Ala Gly Lys Val Arg Gly Gln Thr Pro

Lys Val Ala Lys Gln Glu Lys Lys Lys Lys Lys Thr Gly Arg Ala Lys 130 135 140

Arg Arg Met Gln Tyr Asn Arg Arg Phe Val Asn Val Val Pro Thr Phe 145 150 155 160

Gly Lys Lys Gly Pro Asn Ala Asn Ser 165 170

<210> 995

<211> 156

<212> PRT

<213> Homo sapiens

<400> 995

Gly Ser Gly Thr His Pro Ala Arg Ala Ala Pro Ala Pro His Ala Arg 1 5 10 15

Ala Ser Phe Ser Arg Pro Leu Ala Pro Arg Arg Ser His Leu Ser Ser 20 25 30

Leu Ala His Ala Arg Pro Ala Arg Glu Pro Arg Arg Arg Leu Gly Pro
35 40 45

Ala Glu Ala Pro Pro Arg His Val Phe Ala Ser Arg Arg Lys Leu Glu 50 55 60

Thr Lys Ala Gly His Pro Pro Ala Val Lys Ala Gly Gly Met Arg Ile 65 70 75 80

Val Gln Lys His Pro His Thr Gly Asp Thr Lys Glu Glu Lys Asp Lys 85 90 95

Asp Asp Gln Glu Trp Glu Ser Pro Ser Pro Pro Lys Pro Thr Val Phe 100 105 110

Ile Ser Gly Val Ile Ala Arg Gly Asp Lys Asp Phe Pro Pro Ala Ala 115 120 125

Ala Gln Val Ala His Gln Lys Pro His Ala Ser Met Asp Lys His Pro 130 135 140

Ser Pro Arg Thr Gln His Ile Gln Gln Pro Arg Lys 145 150 155

<210> 996

<211> 217

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 996

Asn Ser Ala Glu Gln Glu Gly Ser Gln Trp Ser Leu Pro Val Leu His
1 5 10 15

Ser Val Pro Asp Pro Ala Cys Leu Thr Leu Xaa Arg Val Ser Lys Gly 20 25 30

Leu Ala Ala Val Arg Ser Ser Val Pro Arg Ala Gly Gly Val Ser Arg 35 40 45

Arg Leu Ala Ala Val Arg Ser Thr Val Leu Cys Arg Ala Val Gly Cys 50 60

Ile Leu Ala Glu Leu Leu Ala His Arg Pro Leu Leu Pro Gly Thr Ser 65 70 75 80

Glu Ile His Gln Ile Asp Leu Ile Val Gln Leu Leu Gly Thr Pro Ser 85 90 95

Glu Asn Ile Trp Pro Gly Phe Ser Lys Leu Pro Leu Val Gly Gln Tyr 100 105 110

Ser Leu Arg Lys Gln Pro Tyr Asn Asn Leu Lys His Lys Phe Pro Trp

Leu Ser Glu Ala Gly Leu Arg Cys Cys Thr Ser Cys Ser Cys Thr Thr 130 135 140

Leu Arg Lys Gly Arg Arg Pro Gly Thr Ala Trp Arg Ala Pro Ile Ser 145 150 155 160

Arg Arg Ser Pro Tyr Pro Val Ser Arg Ser Ser Cys Arg Pro Phe Pro 165 170 175

Thr Thr Ala Thr Ser Gly Pro Pro Gln Pro Pro Pro Arg Ala Arg Ala 180 185 190

Ser Ala Val Asn Pro Asp Gly Gly Pro Gly Thr Arg Leu Tyr Ser His 195 200 205

Thr Arg Ser Ser Asp Gln Trp Cys Leu 210 215

<21	U> 9	9/													
<21	1> 4	66													
<21	2> F	ът													
			sapi	one											
			2457	.0115											
<40	0> 9	97													
Val	Ser	Pro	Arg	, Ala	Gly	Gly	Ala	Gly	Asn	Asn	Arg	Gly	Arg	Ala	His
1				5					10					15	
Ara	Ala	Ser	Ser	· ሮvs	Ser	T.em	Pro	Δla	Pro	Pro	Δla	Thr	Len	Acn	Dro
111.9	111.0		20		DEL	ВСи		25		110	ALU	* 111	30		
			20					25					30		
Arg	Ile	Pro	Pro	Ala	Arg	Leu	Pro	Ala	Met	Ala	Asp	Lys	Glu	Ala	Ala
		35					40					45			
Phe	Asp	Asp	Ala	Val	Glu	Glu	Ara	Val	Ile	Asn	Glu	Glu	Tvr	Lvs	Ile
	50	-				55	-				60		-	•	
						-					•				
m	7	T	•	ml			.		3	+		14-1	mt	•• • •	
_	•	гĀЗ	Asn	Tnr			Leu	TYL	Asp		var	met	Thr	HIS	
65					70					75					80
Leu	Glu	Trp	Pro	Ser	Leu	Thr	Ala	G1n	Trp	Leu	Pro	Asp	Val	Thr	Arg
				85					90					95	
Pro	Glu	G1 17	T.ve	Nen	Dha	Sor	Tlo	Hig	Arg	T.011	Va 1	T.611	G1 v	Thr	Hic
110	o Lu	Q.L.y	100	_	1110	001	110	105	-	neu	V LL L	пса	110	****	1145
			100					103					110		
Thr	Ser	Asp	Glu	Gln	Asn	His	Leu	Val	Ile	Ala	ser	Val	Gln	Leu	Pro
		115					120					125			
Asn	Asp	Asp	Ala	Gln	Phe	Asp	Ala	Ser	His	Tyr	Asp	Ser	Glu	Lys	Gly
	130	_				135				-	140			-	-
C1	Dh.	~1·-	~1··	n b	C1	00-	**-1	0	C1	T	71 0	~ 1	-1 -	G1	71 _
	Pne	GIY	GTĀ	Pne	-	per	Val	261	Gly	_	ire	GIU	TTG	GIU	
145					150					155					160
Lys	Ile	Asn	His	Glu	Gly	Glu	Val	Asn	Arg	Ala	Arg	Tyr	Met	Pro	Gln
				165					170					175	
Asn	Pro	Cvs	Ile	Tle	Ala	Thr	Lvs	Thr	Pro	ser	Ser	azA	Va1	Leu	Val
		- 1-	180		****		-1-	185					190	200	• • • •
			100					103					130		
	_	_					_	_	_	_	_	_		_	
Phe	Asp	Tyr	Thr	Lys	His	Pro	Ser	Lys	Pro	Asp	Pro	Ser	Gly	Glu	Суз
		195					200					205			
Asn	Pro	Asp	Leu	Arg	Leu	Arg	Gly	His	Gln	Lys	Glu	Gly	Tyr	Gly	Leu
	210	-	-	,		215	-			-	220	-	-	-	

Ser Trp Asn Pro Asn Leu Ser Gly His Leu Leu Ser Ala Ser Asp Asp

964

225					230					235	•				240
His	Thr	Ile	Cys	Leu 245	_	Asp	Ile	Ser	Ala 250		. Pro	Lys	Glu	Gly 255	_
Val	Val	Asp	Ala 260	-	Thr	Ile	Phe	Thr 265	_	His	Thr	Ala	Val 270		Glu
Asp	Val	Ser 275	_	His	Leu	Leu	His 280		Ser	Leu	Phe	Gly 285	Ser	Val	Ala
Asp	Asp 290	Gln	Lys	Leu	Met	Ile 295	_	Asp	Thr	Arg	Ser 300		Asn	Thr	Ser
Lys 305	Pro	Ser	His	Ser	Val 310	Asp	Ala	His	Thr	Ala 315		Val	Asn	Суs	1eu
Ser	Phe	Asn	Pro	Tyr 325	Ser	Glu	Phe	Ile	Leu 330		Thr	Gly	Ser	Ala 335	Asp
Lys	Thr	Val	Ala 340	Leu	Trp	Asp	Leu	Arg 345	Asn	Leu	Lys	Leu	Lys 350	Leu	His
Ser	Phe	Glu 355	Ser	His	Lys	Asp	Glu 360	Ile	Phe	Gln	Val	Gln 365	Trp	Ser	Pro
His	Asn 370	Glu	Thr	Ile	Leu	Ala 375	Ser	Ser	Gly	Thr	Asp 380	Arg	Arg	Leu	Asn
Val 385	Trp	Asp	Leu	Ser	Lys 390	Ile	Gly	Glu	Glu	Gln 395	Ser	Pro	Glu	Asp	Ala 400
Glu	Asp	Gly	Pro	Pro 405	Glu	Leu	Leu	Phe	Ile 410	His	Gly	Gly	His	Thr 415	Ala
Lys	Ile	Ser	Asp 420	Phe	Ser	Trp	Asn	Pro 425	Asn	Glu	Pro	Trp	Val 430	Ile	Cys
Ser	Val	Ser 435	Glu	Asp	Asn	Ile	Met 440	Gln	Val	Trp	Gln	Met 445	Ala	Glu	Asn
Ile	Tyr 450	Asn	Asp	Glu	Asp	Pro 455	Glu	Gly	Ser	Va1	Asp 460	Pro	Glu	Gly	Gln
Gly	Ser														

<210> 998 <211> 165 WO 00/55350

965

<212> PRT <213> Homo sapiens Thr Arg Pro Pro Thr Arg Arg Pro Thr Arg Pro Pro Lys Ala Lys Lys Glu Ala Pro Ala Pro Pro Lys Ala Glu Ala Lys Ala Lys Ala Leu Lys 25 Ala Lys Lys Ala Val Leu Lys Gly Val His Ser His Lys Lys Lys 40 Ile Arg Thr Ser Pro Thr Phe Arg Arg Pro Lys Thr Leu Arg Leu Arg Arg Gln Pro Lys Tyr Pro Arg Lys Ser Ala Pro Arg Arg Asn Lys Leu Asp His Tyr Ala Ile Ile Lys Phe Pro Leu Thr Thr Glu Ser Ala Met Lys Lys Ile Glu Asp Asn Asn Thr Leu Val Phe Ile Val Asp Val Lys 100 105 Ala Asn Lys His Gln Ile Lys Gln Ala Val Lys Lys Leu Tyr Asp Ile 120 Asp Val Ala Lys Val Asn Thr Leu Ile Arg Pro Asp Gly Glu Lys Lys 130 135 Ala Tyr Val Arg Leu Ala Pro Asp Tyr Asp Ala Leu Asp Val Ala Asn 155 150

<210> 999 <211> 194 <212> PRT <213> Homo sapiens

Lys Ile Gly Ile Ile

165

<400> 999

Pro Glu Asn Ser Thr Ser Ser Phe Leu Leu Trp Gly Cys Pro Pro Ser 1 5 10 15

Val Val Cys Phe Thr Val Gly Ser Pro Ala Arg Arg Pro Gln Cys Phe 20 25 30

Leu Arg Ala Glu Met Ala Asn Ser Gly Leu Gln Leu Leu Gly Phe Ser 35 40 Met Ala Leu Leu Gly Trp Val Gly Leu Val Ala Cys Thr Ala Ile Pro 55 Gln Trp Gln Met Ser Ser Tyr Ala Gly Asp Asn Ile Ile Thr Ala Gln 70 75 Ala Met Tyr Lys Gly Leu Trp Met Asp Cys Val Thr Gln Ser Thr Gly Met Met Ser Cys Lys Met Tyr Asp Ser Val Leu Ala Leu Ser Ala Ala 105 Leu Gln Ala Thr Arg Ala Leu Met Val Val Ser Leu Val Leu Gly Phe 120 Leu Ala Met Phe Val Ala Thr Met Gly Met Lys Cys Thr Arg Cys Gly 130 135 Gly Asp Asp Lys Val Lys Lys Ala Arg Ile Ala Met Gly Gly Ile Ile Phe Ile Val Ala Gly Leu Ala Ala Leu Val Ala Cys Ser Trp Tyr 165 170 Gly His Gln Ile Val Thr Asp Phe Tyr Asn Pro Leu Ile Pro Thr Asn 185 Ile Lys

Ası	n Ala	Ala 35		Lys	Gln	Leu	Arg 40		Glu	ser	Gln	Lys 45		Arg	Lys
Ası	n Pro 50		Pro	Pro	Ser	Val 55		Val	Val	. Asp	Lys 60		Glu	Glu	Thr
Gla 6	n Pro	Pro	Val	Ala	Leu 70		Lys	Glu	Gly	75		Arg	Val	. Gly	Arg 80
Arg	g Pro	Asp	Gln	Gln 85		Gln	Gly	Glu	Gly 90	-	Ile	Ile	Asp	Arg 95	_
Pro	o Glu	Arg	Arg 100		Pro	Arg	Glu	Arg 105	_	Phe	Glu	Lys	Pro 110		Glu
Glı	ı Lys	Gly 115		Gly	Gly	Glu	Phe 120	Ser	Val	Asp	Arg	Pro 125		Ile	Asp
•	130		-	-	Ť	135	_		-	_	140	_			
Gl ₃	, Arg	Gly	Met	Gly	Arg 150	Gly	Asp	Gly	Phe	Asp 155		Arg	Gly	Lys	Arg 160
Glı	ı Phe	Asp	Arg	His 165	Ser	Gly	Ser	Asp	Arg 170	Ser	Ser	Phe	Ser	His 175	Tyr
Ser	Gly	Leu	Lys 180	His	Glu	Asp	Lys	Arg 185	Gly	Gly	Ser	Gly	Ser 190	His	Asn
Trp	Gly	Thr 195	Val	Lys	Asp	Glu	Leu 200	Thr	Asp	Leu	Asp	Gln 205	Ser	Asn	Val
Thr	Glu 210	Glu	Thr	Pro	Glu	Gly 215	Glu	Glu	His	His	Pro 220	Val	Ala	Asp	Thr
Glu 225	Asn	Lys	Glu	Asn	Glu 230	Val	Glu	Glu	Val	Lys 235	Glu	Glu	Gly	Pro	Lys 240
Glu	Met	Thr	Leu	Asp 245	Glu	Trp	Lys	Ala	11e 250	Gln	Asn	Lys	Asp	Arg 255	Ala
Lys	Val	Glu	Phe 260	Asn	Ile	Arg	Lys	Pro 265	Asn	Glu	Gly	Ala	Asp 270	Gly	Gln
	Lys	275	_				280	_		-		285			
Ala	Glu 290		Ser	Val		Asp		His	Phe	Arg	Lys	Pro	Ala	Asn	Asp

150

968

Ile Thr Ser Gln Leu Glu Ile Asn Phe Gly Asp Leu Gly Arg Pro Gly Arg Gly Gly Arg Gly Gly Arg Gly Arg Gly Arg Gly Arg Pro Asn Arg Gly Ser Arg Thr Asp Lys Ser Ser Ala Ser Ala Pro Asp Val Asp Asp Pro Glu Ala Phe Pro Ala Leu Ala 355 360 <210> 1001 <211> 207 <212> PRT <213> Homo sapiens <400> 1001 Leu Met Ser Val Val Arg Gly Phe Ser Glu Ala Ala Ala Gln Tyr Asn Pro Glu Pro Pro Pro Pro Arg Thr His Tyr Ser Asn Ile Glu Ala Asn 25 Glu Ser Glu Glu Val Arg Gln Phe Arg Arg Leu Phe Ala Gln Leu Ala 40 Gly Asp Asp Met Glu Val Ser Ala Thr Glu Leu Met Asn Ile Leu Asn 50 55 Lys Val Val Thr Arg His Pro Asp Leu Lys Thr Asp Gly Phe Gly Ile 75 Asp Thr Cys Arg Ser Met Val Ala Val Met Asp Ser Asp Thr Thr Gly Lys Leu Gly Phe Glu Glu Phe Lys Tyr Leu Trp Asn Asn Ile Lys Arg Trp Gln Ala Ile Tyr Lys Gln Phe Asp Thr Asp Arg Ser Gly Thr Ile Cys Ser Ser Glu Leu Pro Gly Ala Phe Glu Ala Ala Gly Phe His Leu 135 Asn Glu His Leu Tyr Asn Met Ile Ile Arg Arg Tyr Ser Asp Glu Ser

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Gly Asn Met Asp Phe Asp Asn Phe Ile Ser Cys Leu Val Arg Leu Asp
                165
                                    170
Ala Met Phe Arg Ala Phe Lys Ser Leu Asp Lys Asp Gly Thr Gly Gln
                                185
Ile Gln Val Asn Ile Gln Glu Trp Leu Gln Leu Thr Met Tyr Ser
                                                 205
                            200
        195
<210> 1002
<211> 21
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1002
Ile Phe Cys Asp Thr Arg Ser His Gln Val Ala Xaa Gly Trp Phe Arg
                                     10
                  5
Ile Pro Gly Leu Lys
             20
<210> 1003
<211> 109
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1003
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970

Met Pro Gln Leu Gly Leu Ser Cys Ile Pro Val Glu Gly Pro Xaa Pro 1 5 Cys Leu Xaa Glu Val Arg Leu Cys Cys Val Asn Gly Gln Ala Leu Pro 25 Gln Pro Thr Pro Gly Lys Val His Leu Phe Ser Gly Leu Tyr Lys Val 35 Ser Trp Gly Pro Val Ala Ser Leu Pro Val Arg Ser Asp Phe Ser Leu Ser Ser Pro Val Gly Glu Thr Lys Pro Asp Trp Gly Ala Gln Gly Glu His Gly Lys Gly Arg Leu Pro Cys Leu Ser Leu Ala Val Arg Val 90 Arg Val Thr His Thr Lys Xaa Glu Cys Gly Gln Gln Val 100 105 <210> 1004 <211> 542 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (252) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (519) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1004 Lys Asp Pro Glu Glu Tyr Cys Cys Thr Pro Ala Ala Arg Gly Arg Gly Lys Ser Ala Ala Leu Gly Leu Ala Ile Ala Gly Ala Val Ala Phe Gly Tyr Ser Asn Ile Phe Val Thr Ser Pro Ser Pro Asp Asn Leu His Thr

Leu Phe Glu Phe Val Phe Lys Gly Phe Asp Ala Leu Gln Tyr Gln Glu

His 65		Asp	туг	Glu	11e 70		Gln	Ser	Leu	Asn 75		Glu	Phe	Asn	80 Eys
Ala	Val	Ile	Arg	Val 85		Val	Phe	Arg	Glu 90		Arg	Gln	Thr	Ile 95	
Tyr	Ile	His	Pro		Asp	Ala	Val	Lys 105		Gly	Gln	Ala	Glu 110		Val
Val	Ile	Asp 115		Ala	Ala	Ala	11e 120		Leu	Pro	Leu	Val 125		Ser	Leu
Leu	Gly 130		Tyr	Leu	Val	Phe 135	Met	Ala	Ser	Thr	Ile 140		Gly	Tyr	Glu
Gly 145		Gly	Arg	Ser	Leu 150		Leu	Lys	Leu	Ile 155	Gln	Gln	Leu	Arg	Gln 160
Gln	Ser	Ala	Gln	Ser 165	Gln	Val	Ser	Thr	Thr 170		Glu	Asn	Lys	Thr 175	
Thr	Thr	Ala	Arg 180		Ala	Ser	Ala	Arg 185		Leu	His	Glu	Val 190	Ser	Leu
Gln	Glu	Ser 195		Arg	Tyr	Ala	Pro 200	Gly	Asp	Ala	Val	Glu 205	-	Trp	Leu
Asn	Asp 210	Leu	Leu	Сув	Leu	Asp 215	Cys	Leu	Asn	Ile	Thr 220	Arg	Ile	Val	Ser
Gly 225	Cys	Pro	Leu	Pro	Glu 230	Ala	Cys	Glu	Leu	Tyr 235	Tyr	Val	Asn	Arg	Asp 240
Thr	Leu	Phe	Суз	Tyr 245	His	Lys	Ala	Ser	Glu 250	Val	Xaa	Leu	Gln	Arg 255	Leu
Met	Ala	Leu	Tyr 260	Val	Ala	Ser	His	Tyr 265	Lys	Asn	Ser	Pro	Asn 270	Asp	Leu
Gln	Met	Leu 275	Ser	Asp	Ala	Pro	Ala 280	His	His	Leu	Phe	Суs 285	Leu	Leu	Pro
Pro	Val 290	Pro	Pro	Thr	Gln	Asn 295	Ala	Leu	Pro	Glu	Val 300	Leu	Ala	Val	Ile
Gln 305	Val	Суз	Leu	Glu	Gly 310	Glu	Ile	Ser	Arg	Gln 315	Ser	Ile	Leu	Asn	Ser 320
Leu	Ser	Arg	Gly	Lys 325	Lys	Ala	Ser	Gly	Asp 330	Leu	Ile	Pro	Trp	Thr 335	Val

Ser Glu Gln Phe Gln Asp Pro Asp Phe Gly Gly Leu Ser Gly Gly Arg 340 345 350

Val Val Arg Ile Ala Val His Pro Asp Tyr Gln Gly Met Gly Tyr Gly 355 360 365

Ser Arg Ala Leu Gln Leu Leu Gln Met Tyr Tyr Glu Gly Arg Phe Pro 370 375 380

Cys Leu Glu Glu Lys Val Leu Glu Thr Pro Gln Glu Ile His Thr Val 385 390 395 400

Ser Ser Glu Ala Val Ser Leu Leu Glu Glu Val Ile Thr Pro Arg Lys 405 410 415

Asp Leu Pro Pro Leu Leu Leu Lys Leu Asn Glu Arg Pro Ala Glu Arg 420 425 430

Leu Asp Tyr Leu Gly Val Ser Tyr Gly Leu Thr Pro Arg Leu Leu Lys 435 440 445

Phe Trp Lys Arg Ala Gly Phe Val Pro Val Tyr Leu Arg Gln Thr Pro 450 455 460

Asn Asp Leu Thr Gly Glu His Ser Cys Ile Met Leu Lys Thr Leu Thr 465 470 470 480

Asp Glu Asp Glu Ala Asp Gln Gly Gly Trp Leu Ala Ala Phe Trp Lys
485 490 495

Asp Phe Arg Arg Phe Leu Ala Leu Leu Ser Tyr Gln Phe Ser Thr 500 505 510

Phe Ser Pro Ser Leu Ala Xaa Asn Ile Ile Gln Asn Arg Asn Met Gly 515 520 525

Lys Pro Ala Gln Pro Ala Leu Ser Arg Glu Glu Leu Glu Ala 530 535 540

<210> 1005

<211> 202

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

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Asp 1	Ala	Ala	qeA	Thr 5	Ile	Glu	Thr	Asp	Thr 10	Ala	Thr	Ala	Asp	Thr 15	Th
Val	Ala	Asn	Asn 20	Val	Pro	Pro	Ala	Ala 25	Thr	Ser	Leu	Ile	Asp 30	Leu	Tr
Pro	Gly	Asn 35	Gly	Glu	Gly	Ala	Ser 40	Thr	Leu	Gln	Gly	Glu 45	Pro	Arg	Ala
Pro	Thr 50	Pro	Pro	Ser	Gly	Thr 55	Glu	Val	Thr	Leu	Ala 60	Glu	Val	Pro	Let
Leu 65	Asp	Glu	Val	Ala	Pro 70	Glu	Pro	Leu	Leu	Pro 75	Ala	Xaa	Glu	Gly	Суs 80
Ala	Thr	Leu	Leu	Asn 85	Phe	Asp	Glu	Leu	Pro 90	Glu	Pro	Pro	Ala	Thr 95	Phe
Суs	Asp	Pro	Glu 100	Glu	Val	Glu	Gly	Glu 105	Pro	Leu	Ala	Ala	Pro 110	Gln	Thr
Pro	Thr	Leu 115	Pro	Ser	Ala	Leu	Glu 120	Glu	Leu	Glu	Gln	Glu 125	Gln	Glu	Pro
Glu	Pro 130	His	Leu	Leu	Thr	Asn 135	Gly	Glu	Thr	Thr	Gln 140	Lys	Glu	Gly	Thr
Gln 145	Ala	Ser	Glu	Gly	Tyr 150	Phe	Ser	Gln	Ser	Gln 155	Glu	Glu	Glu	Phe	Ala 160
G1n	Ser	Glu	Glu	Leu 165	Cys	Ala	Lys	Ala	Pro 170	Pro	Pro	Val	Phe	Туг 175	Asn
Lys	Pro	Pro	Glu 180	Ile	Asp	Ile	Thr	Cys 185	Trp	Asp	Ala	Asp	Pro 190	Val	Pro

<210> 1006 <211> 561

<212> PRT

<213> Homo sapiens

Glu Glu Glu Gly Phe Glu Gly Gly Asp 195 200

<400> 1006

Ser Ala Met Arg Lys Phe Ala Tyr Cys Lys Val Val Leu Ala Thr Ser 1 5 10 15

Leu Ile Trp Val Leu Leu Asp Met Phe Leu Leu Tyr Phe Ser Glu Cys Asn Lys Cys Asp Glu Lys Lys Glu Arg Gly Leu Pro Ala Gly Asp 40 Val Leu Glu Pro Val Gln Lys Pro His Glu Gly Pro Gly Glu Met Gly 55 Lys Pro Val Val Ile Pro Lys Glu Asp Gln Glu Lys Met Lys Glu Met Phe Lys Ile Asn Gln Phe Asn Leu Met Ala Ser Glu Met Ile Ala Leu 90 Asn Arg Ser Leu Pro Asp Val Arg Leu Glu Gly Cys Lys Thr Lys Val 1.05 Tyr Pro Asp Asn Leu Pro Thr Thr Ser Val Val Ile Val Phe His Asn 115 120 Glu Ala Trp Ser Thr Leu Leu Arg Thr Val His Ser Val Ile Asn Arg 135 Ser Pro Arg His Met Ile Glu Glu Ile Val Leu Val Asp Asp Ala Ser Glu Arg Asp Phe Leu Lys Arg Pro Leu Glu Ser Tyr Val Lys Lys Leu 170 Lys Val Pro Val His Val Ile Arg Met Glu Gln Arg Ser Gly Leu Ile 180 185 Arg Ala Arg Leu Lys Gly Ala Ala Val Ser Lys Gly Gln Val Ile Thr 200 Phe Leu Asp Ala His Cys Glu Cys Thr Val Gly Trp Leu Glu Pro Leu 215 Leu Ala Arg Ile Lys His Asp Arg Arg Thr Val Val Cys Pro Ile Ile 230 235 Asp Val Ile Ser Asp Asp Thr Phe Glu Tyr Met Ala Gly Ser Asp Met 245 Thr Tyr Gly Gly Phe Asn Trp Lys Leu Asn Phe Arg Trp Tyr Pro Val 265 Pro Gln Arg Glu Met Asp Arg Arg Lys Gly Asp Arg Thr Leu Pro Val

Arg	Thr 290		Thr	Met	Ala	Gly 295		Leu	Phe	Ser	300		Arg	Asp	ту
Phe 305	Gln	Glu	Ile	Gly	Thr 310	Tyr	Asp	Ala	Gly	Met 315	_	Ile	Trp	Gly	Gl ₃ 320
Glu	Asn	Leu	Glu	Ile 325		Phe	Arg	Ile	Trp 330		Cys	Gly	Gly	Thr 335	
Glu	Ile	Val	Thr 340	_	Ser	His	Val	Gly 345		Val	. Phe	Arg	1ys 350		Thi
Pro	Tyr	Thr 355	Phe	Pro	Gly	Gly	Thr 360	_	Gln	Ile	Ile	Asn 365	_	Asn	Ası
Arg	Arg 370	Leu	Ala	Glu	Val	Trp 375		Asp	Glu	Phe	180		Phe	Phe	Туз
Ile 385	Ile	Ser	Pro	Gly	Val 390	Thr	Lys	Val	Asp	Tyr 395	_	Asp	Ile	Ser	Ser 400
Arg	Val	Gly	Leu	Arg 405	His	Lys	Leu	Gln	Cys 410	_	Pro	Phe	Ser	Trp 415	_
Leu	Glu	Asn	Ile 420	Tyr	Pro	Asp	Ser	Gln 425	Ile	Pro	Arg	His	Tyr 430	Phe	Ser
Leu	Gly	Glu 435	Ile	Arg	Asn	Val	Glu 440	Thr	Asn	Gln	Суз	Leu 445	Asp	Asn	Met
	Arg 450	-				455					460	_		-	•
465	Gly				470					475					480
_	Asp		_	485	_			-	490		_			495	
	Lys	-	500			-	_	505			-		510	_	
	Lys	515					520					525		_	-
	Thr 530			_		535					540	·	_		
Ser 545	Arg	Ser	Gln	Gln	Trp 550	Leu	Leu	Arg	Asn	Val 555	Thr	Leu	Pro	Glu	Ile 560

Phe

<210> 1007

WO 00/55350

<211> 189

<212> PRT

<213> Homo sapiens

<400> 1007

Phe Ile Pro Ile Gly Glu Asn Ser Ala Thr Gly Glu Asn Arg Leu Ala
1 5 10 15

Ser Ala Leu Trp Ile Gly Asp Arg Ser Tyr Pro Gly Leu Ser Glu Gly 20 25 30

Asn Ser Arg Pro Pro Ile Pro Gly Pro Pro Tyr Val Ala Ser Pro Asp 35 40 45

Leu Trp Ser His Trp Glu Asp Ser Ala Leu Pro Pro Pro Ser Leu Arg
50 55 60

Pro Val Gln Pro Thr Trp Glu Gly Ser Ser Glu Ala Gly Leu Asp Trp 65 70 75 80

Ala Gly Ala Ser Phe Ser Pro Gly Thr Pro Met Trp Ala Ala Leu Asp $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$

Glu Gln Met Leu Gln Glu Gly Ile Gln Ala Ser Leu Leu Asp Gly Pro 100 105 110

Ala Gln Glu Pro Gln Ser Ala Pro Trp Leu Ser Lys Ser Ser Val Ser 115 120 125

Ser Leu Arg Leu Gln Gln Leu Glu Arg Met Gly Phe Pro Thr Glu Gln 130 135 140

Ala Val Val Ala Leu Ala Ala Thr Gly Arg Val Glu Gly Ala Val Ser 145 150 155 160

Leu Leu Val Gly Gly Gln Val Gly Thr Glu Thr Leu Val Thr His Gly 165 170 175

Lys Gly Gly Pro Ala His Ser Glu Gly Pro Gly Pro Pro 180 185

<210> 1008

<211> 300

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<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 1008
Arg Gln Lys Ser Ser Xaa Leu Trp Pro His Pro Leu Xaa Arg His Arg
Ala Gly Pro Gly Leu Ala Gly Asn Gly Gly Ile Leu Pro Asn Leu Gly
                                25
Asp Gly Gly Gly Trp Xaa Trp Trp Glu Gly Asn His Val Leu Leu
                            40
Asn Leu Phe Leu Val Pro Pro Ile Pro Arg Pro Thr Arg His His Thr
                         55
Ala Asp Asn Thr His Pro Leu Ala Gln Ala Ser Ile His Met Cys Cys
                70
Thr Phe Ser Ser Arg His Ala Asp Asn Pro Thr Arg Pro His His His
Met Pro Lys Cys Thr His Thr Glu Pro His Arg Pro Ser Gly Pro Ala
                               105
Gly Ser Ser Leu Gly Phe Pro Leu Ala His Phe Gln Gly Pro Gly Ala
                           120
Ala Thr Lys Cys Glu Ser Ser Val Ala Ala Pro Ser Phe Ser Pro Ser
                       135
Thr Ser Ile Gly Pro Ile Gly Lys His Arg Gly Leu Thr Leu Phe His
Ile Pro Cys Pro Ala Leu Lys Trp Thr Ile Thr Phe Trp Asp Arg Leu
```

Lys Phe Leu Lys Ser Leu His His Ser Val Pro Ser Lys Gly Ser Pro Cys Gln Trp Gly Phe Glu Arg Glu Phe Leu Glu Pro Thr Phe Lys Phe 200 Cys Leu Ile Trp Arg Glu Thr Lys Ile Gly Arg Gly Lys Arg Thr Pro 215 Asp Val Leu Leu Pro Glu Ile Leu Glu Thr Asp Ser Leu Asp Trp 235 230 Lys Met Asp Lys Ser Ala Leu Thr Trp Arg Val Gly Thr Arg Trp Gly 250 Pro Ala Leu Pro Thr Ala Ala Val Ala Ser Ser Leu Ala Gly Phe Ala Gly Arg Gln Gln Glu Gly Glu Gly Ser Thr Ala Arg Gly Thr Gly 280 Gly Ala Ala Gly Leu Gln Glu Leu Phe Phe His Cys 290 295 <210> 1009 <211> 344 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (10) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (38) <223> Xaa equals any of the naturally occurring L-amino acids <400> 1009 Arg Pro Pro Cys Pro His Ser Arg Ser Xaa Trp Arg Ile Leu Ser Leu 10 Thr Pro Asn Pro Asp Pro Leu Pro Asn Met Ser Val Phe Phe Phe Ile

Phe Leu Asn Ile Phe Xaa Leu Ala Phe Ser Ser Pro Gly Ser Gln Pro 35 40 45

Leu	Leu 50		Ser	Pro	Pro	Ser 55		. Val	. Суа	Trp	Ser 60	-	Gly	Phe	Met
Glu 65		Asn	Gly	Arg	Gly 70		Leu	Val	. Glu	Ser 75	Leu	Lys	Arg	Phe	Cys 80
Ala	Ser	Thr	Arg	Leu 85		Pro	Thr	Pro	Leu 90		Leu	Phe	Pro	Glu 95	Glu
Glu	Ala	Thr	Asn 100	_	Arg	Glu	Gly	Leu 105		Arg	Phe	Ser	Ser 110	Trp	Pro
Phe	Ser	Ile 115		Asp	Val	Val	Gln 120		Leu	Thr	Leu	Gln 125	Val	Gln	Arg
Pro	Leu 130		Ser	Val	Thr	Val 135		Asp	Ala	Ser	Trp		Ser	Glu	Leu
Leu 145	-	Ser	Leu	Phe	Val 150		Phe	Thr	Val	Туг 155		Val	Arg	Trp	Leu 160
Arg	Pro	Val	His	Arg 165	Gln	Leu	Gly	Glu	Ala 170		Glu	Glu	Phe	Ala 175	Leu
Arg	Val	Gln	Gln 180	Leu	Val	Ala	Lys	Glu 185	Leu	Gly	Gln	Thr	Gly 190	Thr	Arg
Leu	Thr	Pro 195	Ala	Asp	Lys	Ala	Glu 200	His	Met	Lys	Arg	Gln 205	Arg	His	Pro
Arg	Leu 210	Arg	Pro	Gln	Ser	Ala 215	Gln	Ser	Ser	Phe	Pro 220	Pro	Ser	Pro	Gly
Pro 225	Ser	Pro	Asp	Val	Gln 230	Leu	Ala	Thr	Leu	Ala 235	Gln	Arg	Val	Lys	Glu 240
Val	Leu	Pro	His	Val 245	Pro	Leu	Gly	Val	Ile 250	Gln	Arg	Asp	Leu	Ala 255	Lys
Thr	Gly	Cys	Val 260	Asp	Leu	Thr	Ile	Thr 265	Asn	Leu	Leu	Glu	Gly 270	Ala	Val
Ala	Phe	Met 275	Pro	Glu	Asp	Ile	Thr 280	Lys	Gly	Thr	Gln	Ser 285	Leu	Pro	Thr
Ala	Ser 290	Ala	Ser	Lys	Phe	Pro 295	Ser	Ser	Gly	Pro	Val 300	Thr	Pro	Gln	Pro
Thr	Ala	Leu	Thr	Phe	Ala 310	Lys	Ser	Ser	Trp	Ala 315	Arg	Gln	Glu	Ser	Leu 320

Glu Arg Lys Gln Ala Leu Tyr Glu Tyr Ala Arg Arg Arg Phe Thr 325 330 335

Glu Arg Arg Ala Gln Glu Ala Asp 340

<210> 1010

<211> 233

<212> PRT

<213> Homo sapiens

<400> 1010

Pro His Cys Glu Pro Asn Pro Gly Ala Gly Ala Met Val Leu His 1 5 10 15

Val Leu Phe Glu His Ala Val Gly Tyr Ala Leu Leu Ala Leu Lys Glu 20 25 30

Val Glu Glu Ile Ser Leu Leu Gln Pro Gln Val Glu Glu Ser Val Leu
35 40 45

Asn Leu Gly Lys Phe His Ser Ile Val Arg Leu Val Ala Phe Cys Pro

Phe Ala Ser Ser Gln Val Ala Leu Glu Asn Ala Asn Ala Val Ser Glu 65 70 75 80

Gly Val Val His Glu Asp Leu Arg Leu Leu Leu Glu Thr His Leu Pro 85 90 95

Ser Lys Lys Lys Lys Val Leu Eu Gly Val Gly Asp Pro Lys Ile Gly 100 105 110

Ala Ala Ile Glu Glu Leu Gly Tyr Asn Cys Gln Thr Gly Gly Val 115 120 125

Ile Ala Glu Ile Leu Arg Gly Val Arg Leu His Phe His Asn Leu Val
130 135 140

Lys Gly Leu Thr Asp Leu Ser Ala Cys Lys Ala Gln Leu Gly Leu Gly 145 150 150 165

His Ser Tyr Ser Arg Ala Lys Val Lys Phe Asn Val Asn Arg Val Asp 165 170 175

Asn Met Ile Ile Gln Ser Ile Ser Leu Leu Asp Gln Leu Asp Lys Asp 180 185 190

Ile Asn Thr Phe Ser Met Arg Val Arg Glu Trp Tyr Gly Tyr His Phe 195 200 205

Pro Glu Leu Val Lys Ile Ile Asn Asp Asn Ala Thr Tyr Cys Arg Leu 210 215 220

Ala Gln Phe Ile Gly Asn Arg Arg Asn 225 230

<210> 1011

<211> 187

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1011

Gly Thr Ser Xaa Phe Ser Phe Pro Leu Gly Arg Glu Glu Ala Met Ala 1 5 10 15

Ala Met Ala Ser Leu Gly Ala Leu Ala Leu Leu Leu Leu Ser Ser Leu 20 25 30

Ser Arg Cys Ser Ala Glu Ala Cys Leu Glu Pro Gln Ile Thr Pro Ser 35 40 45

Tyr Tyr Thr Thr Ser Asp Ala Val Ile Ser Thr Glu Thr Val Phe Ile

Val Glu Ile Ser Leu Thr Cys Lys Asn Arg Val Gln Asn Met Ala Leu 65 70 75 80

Tyr Ala Asp Val Gly Gly Lys Gln Phe Pro Val Thr Arg Gly Gln Asp 85 90 95

Val Gly Arg Tyr Gln Val Ser Trp Ser Leu Asp His Lys Ser Ala His 100 105 110

Ala Gly Thr Tyr Glu Val Arg Phe Phe Asp Glu Glu Ser Tyr Ser Leu 115 120 125

Leu Arg Lys Ala Gln Arg Asn Asn Glu Asp Ile Ser Ile Ile Pro Pro 130 135 140

Leu Phe Thr Val Ser Val Asp His Arg Gly Thr Trp Asn Gly Pro Trp 145 150 155 160

982

Val Ser Thr Glu Val Leu Ala Ala Ala Ile Gly Leu Val Ile Tyr Tyr 165 170 175

Leu Ala Phe Ser Ala Lys Ser His Ile Gln Ala 180 185

<210> 1012

<211> 708

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (153)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (229)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (433)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1012

Ala Leu Arg Pro Ile Ser Ser Val Arg Ala Gly Asp Arg Cys Gln Arg $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Ser Xaa Ala Ala Asp Met Ala Ala Ser Thr Ala Ala Gly Lys Gln Arg

Ile Pro Lys Val Ala Lys Val Lys Asn Lys Ala Pro Ala Glu Val Gln 35 40 45

Ile Thr Ala Glu Gln Leu Leu Arg Glu Ala Lys Glu Arg Glu Leu Glu
50 55 60

Leu Leu Pro Pro Pro Pro Gln Gln Lys Ile Thr Asp Glu Glu Glu Leu 65 70 75 80

Asn Asp Tyr Lys Leu Arg Lys Arg Lys Thr Phe Glu Asp Asn Ile Arg

				85					90					95	
Lys	Asn	Arg	Thr 100		Ile	Ser	Asn	Trp		Lys	Tyr	Ala	Gln 110		Glu
Glu	Ser	Leu 115		Glu	Ile	Gln	Arg 120		Arg	Ser	Ile	Tyr 125	Glu	Arg	Ala
Leu	Asp 130	Val	Asp	Tyr	Arg	Asn 135		Thr	Leu	Trp	Leu 140		Tyr	Ala	Glu
Met 145	Glu	Met	Lys	Asn	Arg 150		Val	Xaa	His	Ala 155	Arg	Asn	Ile	Trp	Asp 160
Arg	Ala	Ile	Thr	Thr 165	Leu	Pro	Arg	Val	Asn 170		Phe	Trp	Tyr	Lys 175	_
Thr	Tyr	Met	Glu 180	Glu	Met	Leu	Gly	Asn 185	Val	Ala	Gly	Ala	Arg 190	Gln	Val
Phe	Glu	Arg 195	Trp	Met	Glu	Trp	Gln 200	Pro	Glu	Glu	Gln	Ala 205	Trp	His	Ser
Tyr	Ile 210	Asn	Phe	Glu	Leu	Arg 215	Tyr	Lys	Glu	Val	Asp 220	Arg	Ala	Arg	Thr
Ile 225	Tyr	Glu	Arg	Xaa	Val 230	Leu	Val	His	Pro	Asp 235	Val	Lys	Asn	Trp	11e 240
Lys	Tyr	Ala	Arg	Phe 245	Glu	Glu	Lys	His	Ala 250	Tyr	Phe	Ala	His	Ala 255	Arg
Lys	Val	Tyr	Glu 260	Arg	Ala	Val	Glu	Phe 265	Phe	Gly	Asp	Glu	His 270	Met	Asp
Glu	His	Leu 275	туr	Val	Ala	Phe	Ala 280	Lys	Phe	Glu	Glu	Asn 285	Gln	Lys	Glu
Phe	Glu 290	Arg	Val	Arg	Val	Ile 295	Tyr	Lys	Tyr	Ala	Leu 300	Asp	Arg	Ile	Ser
Lys 305	Gln	Asp	Ala	Gln	Glu 310	Leu	Phe	Lys	Asn	Tyr 315	Thr	Ile	Phe	Glu	Lys 320
Lys	Phe	Gly	Asp	Arg 325	Arg	Gly	Ile	Glu	Asp 330	Ile	Ile	Val	Ser	Lys 335	Arg
Arg	Phe	Gln	Tyr 340	Glu	Glu	Glu	Val	Lys 345	Ala	Asn	Pro	His	Asn 350	Tyr	Asp
A 1 =	m-r	Dhe	Non.	m	T 0.1	λ	T OU	17=1	Glu.	202	Acn	Λ1 a	G1.,	719	cl.

		355	5				360)				365	5		
Ala	Val 370		g Glu	val	. Tyr	Glu 375	-	, Ala	ıle	e Ala	380		l Pro	Pro	Ile
Gln 385		Lys	arg	, His	390	-	Arg	Tyr	lle	395		Trp) Ile	a Asn	Туз 400
Ala	. Leu	Туг	Glu	Glu 405		Glu	Ala	Lys	Asp 410		Glu	a Arg	y Thr	415	
Val	Tyr	Gln	Ala 420		Leu	Glu	Leu	Ile 425		His	Lys	. Lys	Phe 430		Phe
Xaa	Lys	Met 435	_	Ile	Leu	Tyr	Ala 440		Phe	: Glu	Ile	445	Gln	Lys	Asn
Leu	Ser 450		Ala	Arg	Arg	Ala 455		Gly	Thr	Ser	1le 460	_	· Lys	Cys	Pro
Lys 465	Asn	Lys	Leu	Phe	Lys 470	Val	Tyr	Ile	Glu	1475		Leu	Gln	Leu	Arg 480
Glu	Phe	Asp	Arg	Cys 485	Arg	Lys	Leu	Tyr	Glu 490		Phe	Leu	Glu	Phe 495	_
Pro	Glu	Asn	Cys 500	Thr	Ser	Trp	Ile	Lys 505	Phe	Ala	Glu	Leu	Glu 510		Ile
Leu	Gly	Asp 515		Asp	Arg	Ala	Arg 520	Ala	Ile	Tyr	Glu	Leu 525	Ala	Ile	ser
Gln	Pro 530	Arg	Leu	Asp	Met	Pro 535	Glu	Val	Leu	Trp	Lys 540	Ser	Tyr	Ile	Asp
Phe 545	Glu	Ile	Glu	Gln	Glu 550	Glu	Thr	Glu	Arg	Thr 555	Arg	Asn	Leu	Tyr	Arg 560
Arg	Leu	Leu	Gln	Arg 565	Thr	Gln	His	Val	Lys 570	Val	Trp	Ile	Ser	Phe 575	Ala
3ln	Phe	Glu	Leu 580	Ser	Ser	Gly	ГÀЗ	Glu 585	Gly	Ser	Leu	Thr	Lys 590	Cys	Arg
		595					600			·		605	Glu		•
	610					615					620		Glu		
he	Gly	Thr	Ala	Ser	Asp	Lys	Glu	Arq	Val	Asp	Lys	Leu	Met	Pro	Glu

630 635 625 640 Lys Val Lys Lys Arg Arg Lys Val Gln Thr Asp Asp Gly Ser Asp Ala 645 650 Gly Trp Glu Glu Tyr Phe Asp Tyr Ile Phe Pro Glu Asp Ala Ala Asn 665 Gln Pro Asn Leu Lys Leu Leu Ala Met Ala Lys Leu Trp Lys Lys Gln Gln Gln Glu Lys Glu Asp Ala Glu His His Pro Asp Glu Asp Val Asp 695 Glu Ser Glu Ser 705 <210> 1013 <211> 183 <212> PRT <213> Homo sapiens <400> 1013 Leu Pro Pro Gln Val Ala Asp Thr Met Leu Pro Pro Met Ala Leu Pro 10 Ser Val Ser Trp Met Leu Leu Ser Cys Leu Met Leu Leu Ser Gln Val Gln Gly Glu Glu Pro Gln Arg Glu Leu Pro Ser Ala Arg Ile Arg Cys Pro Lys Gly Ser Lys Ala Tyr Gly Ser His Cys Tyr Ala Leu Phe Leu Ser Pro Lys Ser Trp Thr Asp Ala Asp Leu Ala Cys Gln Lys Arg Pro 65 70 Ser Gly Asn Leu Val Ser Val Leu Ser Gly Ala Glu Gly Ser Phe Val Ser Ser Leu Val Lys Ser Ile Gly Asn Ser Tyr Ser Tyr Val Trp Ile Gly Leu His Asp Pro Thr Gln Gly Thr Glu Pro Asn Gly Glu Gly Trp Glu Trp Ser Ser Ser Asp Val Met Asn Tyr Phe Ala Trp Glu Arg Asn

Pro Ser Thr Ile Ser Ser Pro Gly His Cys Ala Ser Leu Ser Arg Ser 155 Thr Ala Phe Leu Arg Trp Lys Asp Tyr Asn Cys Asn Val Arg Leu Pro 170 165 Tyr Val Cys Lys Phe Thr Asp 180 <210> 1014 <211> 213 <212> PRT <213> Homo sapiens <400> 1014 Val Thr Asp Gly Gly Ser Ala Arg Lys Pro Lys Met Ala Val Pro Ala 10 Ala Leu Ile Leu Arg Glu Ser Pro Ser Met Lys Lys Ala Val Ser Leu 25 Ile Asn Ala Ile Asp Thr Gly Arg Phe Pro Arg Leu Leu Thr Arg Ile 40 Leu Gln Lys Leu His Leu Lys Ala Glu Ser Ser Phe Ser Glu Glu Glu Glu Glu Lys Leu Gln Ala Ala Phe Ser Leu Glu Lys Gln Asp Leu His Leu Val Leu Glu Thr Ile Ser Phe Ile Leu Glu Gln Ala Val Tyr His Asn Val Lys Pro Ala Ala Leu Gln Gln Gln Leu Glu Asn Ile His Leu 105 Arg Gln Asp Lys Ala Glu Ala Phe Val Asn Thr Trp Ser Ser Met Gly 120 Gln Glu Thr Val Glu Lys Phe Arg Gln Arg Ile Leu Ala Pro Cys Lys Leu Glu Thr Val Gly Trp Gln Leu Asn Teu Gln Met Ala His Ser Ala

Gln Ala Lys Leu Lys Ser Pro Gln Ala Val Leu Gln Leu Gly Val Asn

170

Asn Glu Asp Ser Lys Ser Leu Glu Lys Val Leu Val Glu Phe Ser His 180 185 190

Lys Glu Leu Phe Asp Phe Tyr Asn Lys Leu Glu Thr Ile Gln Ala Gln 195 200 205

Leu Asp Ser Leu Thr 210

<210> 1015

<211> 544

<212> PRT

<213> Homo sapiens

<400> 1015

Ala Pro Gly Thr Met Asn Gly Glu Ala Ile Cys Ser Ala Leu Pro Thr 1 5 10 15

Ile Pro Tyr His Lys Leu Ala Asp Leu Arg Tyr Leu Ser Arg Gly Ala 20 25 30

Ser Gly Thr Val Ser Ser Ala Arg His Ala Asp Trp Arg Val Gln Val
35 40 45

Ala Val Lys His Leu His Ile His Thr Pro Leu Leu Asp Ser Glu Arg 50 55 60

Lys Asp Val Leu Arg Glu Ala Glu Ile Leu His Lys Ala Arg Phe Ser 65 70 75 80

Tyr Ile Leu Pro Ile Leu Gly Ile Cys Asn Glu Pro Glu Phe Leu Gly 85 90 95

Ile Val Thr Glu Tyr Met Pro Asn Gly Ser Leu Asn Glu Leu Leu His
100 105 110

Arg Lys Thr Glu Tyr Pro Asp Val Ala Trp Pro Leu Arg Phe Arg Ile 115 120 125

Leu His Glu Ile Ala Leu Gly Val Asn Tyr Leu His Asn Met Thr Pro 130 135 140

Pro Leu Leu His His Asp Leu Lys Thr Gln Asn Ile Leu Leu Asp Asn 145 150 155 160

Glu Phe His Val Lys Ile Ala Asp Phe Gly Leu Ser Lys Trp Arg Met 165 170 175

Met Ser Leu Ser Gln Ser Arg Ser Ser Lys Ser Ala Pro Glu Gly Gly

			180)				185	5				190)	
Thr	lle	11e		. Met	: Pro	Pro	200		туг	c Glu	ı Pro	205		ı Lys	S Se
Arg	Ala 210		Ile	Lys	His	215		ту:	: Sei	туг	220		l Ile	Thi	Tr
Glu 225		Leu	Ser	Arg	1 Lys 230		Pro	Phe	e Glu	1 Asp 235		l Thi	Asr	Pro	240
Gln	Ile	Met	Туг	Ser 245		Ser	Gln	Gly	His 250	Arg	Pro	Val	Ile	255	
Glu	Ser	Leu	Pro 260		Asp	Ile	Pro	His 265		, Ala	Arç	, Met	: Ile 270		Leu
Ile	Glu	Ser 275		Trp	Ala	Gln	Asn 280		Asp	Glu	Arg	Pro 285		Phe	Leu
Lys	Cys 290	Leu	Ile	Glu	Leu	Glu 295		Val	Leu	Arg	Thr 300		Glu	Glu	Ile
Thr 305	Phe	Leu	Glu	Ala	Val 310	Ile	Gln	Leu	Lys	Lys 315		Lys	Leu	Gln	Ser 320
Val	Ser	Ser	Ala	Ile 325	His	Leu	Cys	Asp	Lys 330	Lys	Lys	Met	Glu	Leu 335	
Leu	Asn	Ile	Pro 340	Val	Asn	His	Gly	Pro 345	Gln	Glu	Glu	Ser	Cys 350	Gly	Ser
Ser	Gln	Leu 355	His	Glu	Asn	Ser	Gly 360	Ser	Pro	Glu	Thr	Ser 365	Arg	Ser	Leu
Pro	Ala 370	Pro	Gln	Asp	Asn	Asp 375	Phe	Leu	Ser	Arg	Lys 380	Ala	Gln	Asp	Cys
Tyr 385	Phe	Met	Lys	Leu	His 390	His	Суз	Pro	Gly	Asn 395	His	Ser	Trp	Asp	Ser 400
Thr	Ile	Ser	Gly	Ser 405	Gln	Arg	Ala	Ala	Phe 410	Cys	Asp	His	Lys	Thr 415	Thr
Pro	Cys	Ser	Ser 420	Ala	Ile	Ile	Asn	Pro 425	Leu	Ser	Thr	Ala	Gly 430	Asn	Ser
Slu		Leu 435	Gln	Pro	Gly	Ile	Ala 440	Gln	Gln	Trp	Ile	Gln 445	Ser	Lys	Arg
Slu	Asp	Ile	Val	Asn	Gln	Met	Thr	Glu	Ala	Cys	Leu	Asn	Gln	Ser	Leu

450 455 460 Asp Ala Leu Leu Ser Arg Asp Leu Ile Met Lys Glu Asp Tyr Glu Leu 470 Val Ser Thr Lys Pro Thr Arg Thr Ser Lys Val Arg Gln Leu Leu Asp Thr Thr Asp Ile Gln Gly Glu Glu Phe Ala Lys Val Ile Val Gln Lys 505 Leu Lys Asp Asn Lys Gln Met Gly Leu Gln Pro Tyr Pro Glu Ile Leu 520 Val Val Ser Arg Ser Pro Ser Leu Asn Leu Leu Gln Asn Lys Ser Met 535 540 <210> 1016 <211> 257 <212> PRT <213> Homo sapiens <400> 1016 His Pro Ser Ala Pro Arg Ala Gly Lys Ala His Leu Lys Arg Ala Ile Leu Gly Gln Glu Glu Ala Leu Arg Leu His Ala Leu Cys Arg Val Leu 2.2 Arg Glu Val Asp Leu Leu Arg Ala Val Ile Ser Gln Thr Leu Gln Arg Ser Leu Ala Lys Tyr Ala Glu Leu Asp Arg Glu Asp Asp Phe Cys Glu Ala Ala Glu Ala Pro Asp Ile Gln Pro Lys Thr His Gln Lys Pro Glu Ala Arg Met Pro Arg Leu Ser Gln Gly Lys Gly Pro Asp Ile Phe His

Arg Leu Gly Pro Leu Ser Val Phe Ser Ala Lys Asn Arg Trp Arg Leu

Val Gly Pro Val His Leu Thr Arg Gly Glu Gly Gly Phe Gly Leu Thr 120

105

125

Leu Arg Gly Asp Ser Pro Val Leu Ile Ala Ala Val Ile Pro Gly Ser 130 135 140

Gln Ala Ala Ala Ala Gly Leu Lys Glu Gly Asp Tyr Ile Val Ser Val 145 150 155 160

Asn Gly Gln Pro Cys Arg Trp Trp Arg His Ala Glu Val Val Thr Glu
165 170 175

Leu Lys Ala Ala Gly Glu Ala Gly Ala Ser Leu Gln Val Val Ser Leu 180 185 190

Leu Pro Ser Ser Arg Leu Pro Ser Leu Gly Asp Arg Arg Pro Val Leu 195 200 205

Leu Gly Pro Arg Gly Leu Leu Arg Ser Gln Arg Glu His Gly Cys Lys 210 215 220

Thr Pro Ala Ser Thr Trp Ala Ser Pro Arg Ala Leu Leu Asn Trp Ser 225 230 235 240

Arg Lys Ala Gln Gln Gly Lys Thr Gly Gly Cys Pro Ser Pro Val Pro 245 250 255

Gln

<210> 1017

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1017

Ala Ser Asp Arg Arg Gly Tyr Ser Ser Arg Ile Val Gly Gly Asn Met

1 5 10 15

Ser Leu Leu Ser Gln Trp Pro Trp Gln Ala Ser Leu Gln Phe Gln Gly \$20\$ \$25\$ 30

Tyr His Leu Cys Gly Gly Ser Val Ile Thr Pro Leu Trp Ile Ile Thr 35 40 45

Ala Ala His Cys Val Tyr Asp Leu Tyr Leu Pro Lys Ser Trp Thr Ile 50 55 60

Gln Val Gly Leu Val Ser Leu Leu Asp Asn Pro Ala Pro Ser His Leu 65 70 75 80

Val Glu Lys Ile Val Tyr His Ser Lys Tyr Lys Pro Lys Arg Leu Gly 85 90 95

Asn Asp Ile Ala Leu Met Lys Leu Ala Gly Pro Leu Thr Phe Asn Glu 100 105 110

Met Ile Gln Pro Val Cys Leu Pro Asn Ser Glu Glu Asn Phe Pro Asp 115 120 125

Gly Lys Val Cys Trp Thr Ser Gly Trp Gly Ala Thr Glu Asp Gly Ala 130 135 140

Gly Asp Ala Ser Pro Val Leu Asn His Ala Ala Val Pro Leu Ile Ser 145 150 155 160

Asn Lys Ile Cys Asn His Arg Asp Val Tyr Gly Gly Ile Ile Ser Pro 165 170 175

Ser Met Leu Cys Ala Gly Tyr Leu Thr Gly Gly Val Asp Ser Cys Gln 180 185 190

Gly Asp Ser Gly Gly Pro Leu Val Cys Gln Glu Arg Arg Leu Trp Lys
195 200 205

Leu Val Gly Ala Thr Ser Phe Gly Ile Gly Cys Ala Glu Val Asn Lys 210 215 220

Pro Gly Val Tyr Thr Arg Val Thr Ser Phe Leu Asp Trp Ile His Glu 225 230 235 240

Gln Met Glu Arg Asp Leu Lys Thr 245

<210> 1018

<211> 224

<212> PRT

<213> Homo sapiens

<400> 1018

Gly Arg Val Ser Ala Pro Val Pro Gly Lys Met Val Leu Gly Gly Cys
1 5 10 15

Pro Val Ser Tyr Leu Leu Cys Gly Gln Ala Ala Leu Leu Cly 20 25 30

Asn Leu Leu Leu His Cys Val Ser Arg Ser His Ser Gln Asn Ala 35 40 45

Thr Ala Glu Pro Glu Leu Thr Ser Ala Gly Ala Ala Gln Pro Glu Gly

992

50 60 Pro Gly Gly Ala Ala Ser Trp Glu Tyr Gly Asp Pro His Ser Pro Val 70 75 Ile Leu Cys Ser Tyr Leu Pro Asp Glu Phe Ile Glu Cys Glu Asp Pro 90 Val Asp His Val Gly Asn Ala Thr Ala Ser Gln Glu Leu Gly Tyr Gly 105 100 Cys Leu Lys Phe Gly Gly Gln Ala Tyr Ser Asp Val Glu His Thr Ser 120 Val Gln Cys His Ala Leu Asp Gly Ile Glu Cys Ala Ser Pro Arg Thr Phe Leu Arg Glu Asn Lys Pro Cys Ile Lys Tyr Thr Gly His Tyr Phe Ile Thr Thr Leu Leu Tyr Ser Phe Phe Leu Gly Cys Phe Gly Val Asp Arg Phe Cys Leu Gly His Thr Gly Thr Ala Val Gly Lys Leu Leu Thr Leu Gly Gly Leu Gly Ile Trp Trp Phe Val Asp Leu Ile Leu Leu Ile 200 Thr Gly Gly Leu Met Pro Ser Asp Gly Ser Asn Trp Cys Thr Val Tyr

<210> 1019

<211> 53

<212> PRT

<213> Homo sapiens

<400> 1019

Asn Val Pro Val Cys His Leu Ser Thr Trp Lys Ile Leu Tyr Ile Trp 1 5 10 15

Lys Val Tyr Ala Ser Leu Asn Lys Tyr Met Leu Leu Asn Lys Pro Tyr

His Ser Leu Arg Asn Cys Ile Tyr Phe Ile Ile Cys Pro Phe Arg Asn 35 40 45

Gln Val Phe Cys Ile 50

<210> 1020

<211> 70

<212> PRT

<213> Homo sapiens

<400> 1020

Phe Tyr Thr Asn Leu Ile Trp Leu Pro Phe Val Pro Leu Ile Ser Gln 1 5 10 15

Met Phe Lys Cys Ile Gly Phe Gly Phe Ser Met Tyr Lys Leu Pro Tyr 20 25 30

Leu Leu Met Ser Ile Phe Cys Leu Phe Asn Phe Val Tyr Leu Leu Phe 35 40 45

Cys Phe Trp Ile His Phe Leu Ile Arg Ser His Met Ile Asn Ile Ile 50 55 60

Ser Ile Val Ile Ile Pro

<210> 1021

<211> 337

<212> PRT

<213> Homo sapiens

<400> 1021

Arg Lys Arg Lys Gln Ala Ala Arg Ala Ala Glu Glu Pro Gly Ala Ala 1 $$ 15

Met Asp Val Arg Ala Leu Pro Trp Leu Pro Trp Leu Leu Trp Leu Leu 20 25 30

Cys Arg Gly Gly Gly Asp Ala Asp Ser Arg Ala Pro Phe Thr Pro Thr 35 40 45

Trp Pro Arg Ser Arg Glu Arg Glu Ala Ala Ala Phe Arg Glu Ser Leu 50 55 60

Asn Arg His Arg Tyr Leu Asn Ser Leu Phe Pro Ser Glu Asn Ser Thr 65 70 75 80

Ala Phe Tyr Gly Ile Asn Gln Phe Ser Tyr Leu Phe Pro Glu Glu Phe

				85					90					95	
Lys	Ala	Ile	Туr 100		Arg	Ser	Lys	Pro 105		Lys	Phe	Pro	Arg	Tyr	Ser
Ala	Glu	Val 115		Met	Ser	Ile	Pro 120		Val	Ser	Leu	Pro 125		Arg	Phe
Asp	Trp 130	_	Asp	Lys	Gln	Val 135		Thr	Gln	Val	Arg 140		Gln	Gln	Met
Cys 145	_	Gly	Cys	Trp	Ala 150	Phe	Ser	Val	Val	Gly 155	Ala	Val	Glu	Ser	Ala 160
Tyr	Ala	Ile	Lys	Gly 165	Lys	Pro	Leu	Glu	Asp 170	Leu	Ser	Val	Gln	Gln 175	
Ile	Asp	Cys	Ser 180	Tyr	Asn	Asn	Туг	Gly 185	-	Asn	Gly	Gly	5er 190	Thr	Leu
Asn	Ala	Leu 195	Asn	Trp	Leu	Asn	Lys 200	Met	Gln	Val	Lys	Leu 205	Val	Lys	Asp
Ser	Glu 210	Tyr	Pro	Phe	Lys	Ala 215	Gln	Asn	Gly	Leu	Cys 220	His	Tyr	Phe	Ser
Gly 225	Ser	His	Ser	Gly	Phe 230	Ser	Ile	Lys	Gly	Tyr 235	Ser	Ala	Tyr	Asp	Phe 240
Ser	Asp	Gln	Glu	Asp 245	Glu		Ala	Lys	Ala 250	Leu	Leu	Thr	Phe	Gly 255	Pro
Leu	Val	Val	Ile 260	Val	Asp	Ala	Val	Ser 265	Trp	Gln	Asp	Tyr	Leu 270	Gly	Gly
Ile	Ile	Gln 275	His	His	Cys	Ser	ser 280	Gly	Glu	Ala	Asn	His 285	Ala	Val	Leu
Ile	Thr 290	Gly	Phe	Asp	Lys	Thr 295	Gly	Ser	Thr	Pro	Tyr 300	Trp	Ile	Val	Arg
Asn 305	Ser	Trp	Gly	Ser	Ser 310	Trp	Gly	Val	Asp	Gly 315	туг	Ala	His	Val	Lys 320
Met	Gly	Ser	Asn	Val 325	Cys	Gly	Ile	Ala	Asp 330	Ser	Val	Ser	Ser	Ile 335	Phe
Val															

995

<210> 1022 <211> 134

<212> PRT

<213> Homo sapiens

<400> 1022

Ala Ser Ala Glu Phe Glu Met Ala Gly Gly Lys Ala Gly Lys Asp Ser 1 5 10 15

Gly Lys Ala Lys Thr Lys Ala Val Ser Arg Ser Gln Arg Ala Gly Leu 20 25 30

Gln Phe Pro Val Gly Arg Ile His Arg His Leu Lys Ser Arg Thr Thr 35 40 45

Ser His Gly Arg Val Gly Ala Thr Ala Ala Val Tyr Ser Ala Ala Ile 50 55 60

Leu Glu Tyr Leu Thr Ala Glu Val Leu Glu Leu Ala Gly Asn Ala Ser 65 70 75 80

Lys Asp Leu Lys Val Lys Arg Ile Thr Pro Arg His Leu Gln Leu Ala 85 90 95

Ile Arg Gly Asp Glu Glu Leu Asp Ser Leu Ile Lys Ala Thr Ile Ala
100 105 110

Gly Gly Val Ile Pro His Ile His Lys Ser Leu Ile Gly Lys Lys 115 120 125

Gly Gln Gln Lys Thr Val

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<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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Gly I		Phe	Gln	Thr 5	Cys	Ile	His	Leu	Leu 10		Leu	Pro	Val	Leu 15	Val
His	Gly	Glu	Leu 20	Phe	Ala	Pro	Pro	Arg 25	_	Leu	Arg	Arg	Ala 30	Ala	Gly
Xaa	Pro	Trp 35	Thr	Leu	Val	Thr	Ser 40		Хаа	Ser	Leu	Arg 45	Pro	Ser	Gly
Pro	Cys 50		Arg	Pro	Gly	Arg 55	Ala	Leu	Leu	Pro	Ser 60	Cys	Ala	Pro	Ala
Ala 65	-	Xaa	Pro	Trp	Gly 70	_	Val	Val	Trp	Cys 75	Trp	Glu	Gly	Val	Leu 80
Gln	Gly	Glu	Glu	Asp 85	Leu	Glu	Gly	Leu	Gly 90	Ala	Ala	Val	Leu	Asn 95	Arg
Leu	Thr	Leu	Arg 100	Arg	Pro	Leu	Ser	Ala 105	Ala	Leu	Leu	Phe	Ile 110	Thr	Val
Pro	His	Ser 115	Gly	Arg	Arg	Ser	Pro 120	Val	Ala	Gly	Gln	Val 125	Pro	Met	Ala
Суз	Ser 130	Leu	Glu	Pro	Asp	Phe 135	Arg	Cys	Phe	Gly	Ile 140	Arg	Ser	Pro	Gln
His 145	Arg	Gln	Val	His	Pro 150	Ile	Ile	Thr	Leu	Pro 155	Val	Pro	Gly	Trp	Ala 160
Gly	Asp	Ser	Gly	Thr 165	Val	Met	Pro	Gly	Ala 170	Arg	Thr	Ala	Ala	Leu 175	Pro
Leu	His	Thr	Asp 180	Gly	Leu	Gly	Val	Ala 185	Leu	Arg	Pro	His	Pro 190	Thr	Leu
Ile	Ser	G1y 195	Arg	Gly	Ser	Pro	Glu 200	Trp	Ser	Leu	Val	Arg 205	Ala	Val	Ala
Lys	Pro 210	Ala	Val	Ser	Phe	Leu 215	His	Lys	Val	Pro	Pro 220	Pro	Leu	Ser	Val
Ser 225	Gly														

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Pro	Ala	Leu	Arg 20	-	Thr	Leu	Pro	Ile 25	Leu	Phe	Gly	ser	Leu 30	Arg	Arç
Cys	Leu	Cys 35	Leu	Ser	Asp	Lys	Tyr 40	Ser	Gln	Ala	Cys	His 45		Leu	Gly
Ser	Lys 50		Arg	Arg	Cys	Arg 55	Lys	Pro	Gly	Pro	Arg 60		Arg	Gln	Leu
Thr 65	Arg	Val	Asp	Lys	Ser 70	Pro	Glu	Met	Trp	Cys 75	Ile	Val	Leu	Phe	Ser 80
Leu	Leu	Ala	Trp	Val 85	Tyr	Ala	Glu	Pro	Thr 90	Met	Tyr	Gly	Glu	Ile 95	Leu
Ser	Pro	Asn	Туг 100	Pro	Gln	Ala	туг	Pro 105	Ser	Glu	Val	Glu	Lys 110	Ser	Trp
qeA	Ile	Glu 115	Val	Pro	Glu	Gly	Туг 120	Gly	Ile	His	Leu	Tyr 125	Phe	Thr	His
Leu	Asp 130	Ile	Glu	Leu	Ser	Glu 135	Asn	Cys	Ala	Tyr	Asp 140	Ser	Val	Gln	Ile
Ile 145	Ser	Gly	Asp	Thr	Glu 150	Glu	Gly	Arg	Leu	Cys 155	Gly	Gln	Arg	Ser	Ser 160
Asn	Asn	Pro	His	ser 165	Pro	Ile	Val	Glu	Glu 170	Phe	Gln	Val	Pro	Tyr 175	Asn
Lys	Leu	Gln	Val 180	Ile	Phe	Lys	Ser	Asp 185	Phe	Ser	Asn	Glu	Glu 190	Arg	Phe
Thr	Gly	Phe 195	Ala	Ala	Tyr	Tyr	Val 200	Ala	Thr	Asp	Ile	Asn 205	Glu	Cys	Thr

Asp	Phe 210		Asp	Val	Pro	Cys 215		His	Phe	Cys	220		Phe	Ile	Gly
Gly 225	Tyr	Phe	Cys	Ser	Cys 230	Pro	Pro	Glu	Tyr	Phe 235		His	Asp	Asp	Met 240
Lys	Asn	Cys	Gly	Val 245		Cys	Ser	Gly	Asp 250	Val	Phe	Thr	Ala	Leu 255	
Gly	Glu	Ile	Ala 260		Pro	Asn	Tyr	Pro 265		Pro	Tyr	Pro	Glu 270		Ser
Arg	Cys	Glu 275	Tyr	Gln	Ile	Arg	Leu 280		Lys	Gly	Phe	Gln 285		Val	Val
	290					295				Ala	300				
305					310					Gly 315					320
				325					330					335	
			340	-				345		Asp			350		-
		355					360			Pro		365			
	370					375				Ala	380				
385	•	•			390			-		Asp 395	•				400
	-	_		405					410	Ser		-		415	
			420					425		Gln			430		
		435					440	-		Glu	-	445			
	450	-				455	_			Glu	460		_	_	-
165	ern	ASN	етй	αтλ	Gly 470	чτλ	GTÜ	ryr	HIS	Cys 475	АТЯ	стЛ	ASN	сτλ	Ser 480

Trp	Val	Asn	Glu	Val 485		Gly	Pro	Glu	Leu 490		Lys	Cys	Val	Pro 495	
Cys	Gly	Val	Pro 500	_	Glu	Pro	Phe	Glu 505		Lys	Gln	Arg	Ile 510		Gly
Gly	Ser	Asp 515		Asp	Ile	Lys	Asn 520	Phe	Pro	Trp	Gln	Val 525		Phe	Asp
Asn	Pro 530		Ala	Gly	Gly	Ala 535	Leu	Ile	Asn	Glu	Туг 540		Val	Leu	Thr
Ala 545		His	Val	Val	Glu 550	Gly	Asn	Arg	Glu	Pro 555		Met	Tyr	Val	Gly 560
Ser	Thr	Ser	Val	Gln 565		Ser	Arg	Leu	Ala 570	-	Ser	Lys	Met	Leu 575	
Pro	Glu	His	Val 580	Phe	Ile	His	Pro	Gly 585	_	Lys	Leu	Leu	Glu 590	Val	Pro
Glu	Gly	Arg 595	Thr	Asn	Phe	Asp	Asn 600	Asp	Ile	Ala	Leu	Val 605	Arg	Leu	Lys
Asp	Pro 610	Val	Lys	Met	Gly	Pro 615	Thr	Val	Ser	Pro	Ile 620	Суѕ	Leu	Pro	Gly
Thr 625	Ser	Ser	Asp	Tyr	Asn 630	Leu	Met	Asp	Gly	Asp 635	Leu	Gly	Leu	Ile	Ser 640
Gly	Trp	Gly	Arg	Thr 645		Lys	Arg	Asp	Arg 650	Ala	Val	Arg	Leu	Lys 655	Ala
Ala	Arg	Leu	Pro 660	Val	Ala	Pro	Leu	Arg 665	Lys	Суз	Lys	Glu	Val 670	Lys	Val
Glu	Lys	Pro 675	Thr	Ala	Asp	Ala	Glu 680	Ala	Tyr	Val	Phe	Thr 685	Pro	Asn	Met
Ile	Cys 690	Ala	Gly	Gly	Glu	Lys 695	Gly	Met	Asp	Ser	Cys 700	Lys	Gly	Asp	Ser
Gly 705	Gly	Ala	Phe	Ala	Val 710	Gln	Asp	Pro	Asn	Asp 715	Lys	Thr	Lys	Phe	Tyr 720
Ala	Ala	Gly	Leu	Val 725	Ser	Trp	Gly	Pro	Gln 730	Суз	Gly	Thr	Tyr	Gly 735	Leu
Tyr	Thr	Arg	Val 740	Lys	Asn	Tyr	Val	Asp 745	Trp	Ile	Met	Lys	Thr 750	Met	Gln

PCT/US00/05882

1000

Glu Asn Ser Thr Pro Arg Glu Asp 755 760

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135

Pro Arg Lys Thr Leu Thr Pro Glu Pro Ala Pro Ser Leu Ser Arg Pro

155